

IDENTITY DEVELOPMENT AND CAREER MATURITY PATTERNS
OF ELITE RESIDENT ATHLETES AT THE
UNITED STATES OLYMPIC TRAINING CENTER

By

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It is to my mother, Vic, and my late father, Jack, that I dedicate this work. I'll always remember my father for encouraging me to follow my dreams and to "never sweat the small stuff." My eternal love and gratitude are extended to my mother for providing me with the support, roots, and wings that enabled me to pursue my dreams and attain my goals.

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Abstract of Dissertation Presented to the Graduate School
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IDENTITY DEVELOPMENT AND CAREER MATURITY PATTERNS
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UNITED STATES OLYMPIC TRAINING CENTER

By

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Based on career development and ego-identity theories, it has been presumed that elite (i.e., world class) athletes (a) are developmentally delayed in regard to career maturity and (b) have an enhanced presence of athletic identity. Therefore, one issue investigated in this study was whether these assumptions were true when elite athletes were compared to nonathletes. A second focus of the investigation was how these two variables varied in regard to ego-identity status, age, gender, years of education, parents' annual income, and years in competitive sport (athletes only). Both quantitative (survey) and qualitative (structured interview) data were gathered and analyzed.

Participants included 72 elite athletes affiliated with the U.S. Olympic Training Center and 99 nonathletes identified

by the friendship propinquity, or "snowball," sampling technique. The Adult Career Concerns Inventory (ACCI), Athlete Identity Measurement Scales (AIMS), and Extended Objective Measure of Ego-Identity Status were used to assess career maturity, presence of an athletic identity, and ego-identity status, respectively. No significant quantitative differences in career maturity were found between elite athletes and nonathletes. However, there was a significant difference in presence of athletic identity. The elite athletes had significantly higher AIMS scores, thus confirming that athletic identity is more central to elite athletes than to nonathletes. Both age and years of education were positively correlated with career maturity for each group of respondents, but the correlation was statistically significant only for the nonathletes. No other significant differences or relationships were found. The qualitative data revealed that most of the respondents in the elite athlete subsample had engaged in developmentally appropriate career-related activities.

It was concluded that elite athletes are neither as developmentally delayed nor as distinct from nonathletes in regard to career maturity as has been previously presumed. It was recommended that counselors and educational professionals not stereotype elite athletes as career immature but also be sensitive to the strong athletic identity among them. It was also recommended that further quantitative and qualitative

research be conducted with elite athletes to determine how other factors are associated with their career development.

CHAPTER 1 INTRODUCTION

The most important thing in the Olympic Games is not to win but to take part, just as the most important thing in life is not the triumph but the struggle. The essential thing is not to have conquered but to have fought well.
Baron Pierre de Coubertin,
founder of the modern Olympic Games
(United States Olympic Committee, 1992, p.67)

In recent years there has been controversial research and professional speculation concerning the benefits of participating in sports and its effects in regard to the psychosocial and career developments of intercollegiate athletes. Even more recently, this type of attention has been focused upon so-called elite athletes such as the persons selected to train at the United States Olympic Training Center. Many authors have suggested that the effects of participation at the intercollegiate level are negative. For example, Petitpas and Champagne (1988) suggested that there is considerable developmental delay among student-athletes. Similarly, Kennedy and Dimick (1987) concluded from their study that the career maturity of male intercollegiate scholarship athletes in revenue-producing sports was no higher than that of the average ninth-grade student.

Since sports have often been considered a valuable part of socialization for young people, it is disturbing to think that participation in sports could be considered a negative experience. However, there are many different levels at which an individual can participate, including local recreational competition; intramurals; Divisions I, II, and III in college; elite (or Olympic level); and professional. Much of the research in the area of identity and career development in the athletic population has been conducted on the athletes in Division I universities because these athletes attend universities often having athletics as a primary focus (theoretically, along with academics). However, the focus of this study is on elite athletes, those who are engaged in active participation on a daily basis in their sport with the expectation that they will one day compete or have competed in an Olympic Games.

It has been suggested that elite athletes derive a certain amount of their identity from sport and generally structure their lives to be compatible with athletic advancement (Brewer, VanRaalte, & Lindner, 1993; Nelson, 1983; Ogilvie & Howe, 1986; Petitpas, 1981). The commitment to participate in athletics at an elite level resembles, in many ways, traditional occupational paths and meets the definition of a vocational career that is based primarily upon the psychological attachment to an occupational pursuit rather than to an economic one (Sears, 1982).

While elite athletes may be subsumed in the population of athletes studied at Division I institutions, elite athletes as a group unto themselves have not been well studied. In particular, it is rare to have access to a group of elite athletes who are not in a university setting. However, the United States Olympic Training Center (USOTC) provides the unique environment in which access to this population is possible.

The USOTC is concerned about the athletic, academic, and personal development of the athletes that train there. Thus, this research provided some foundation for programs being developed that will facilitate the development of the resident athletes and also will provide direction for those programs. An assistant executive director of the United States Olympic Committee (USOC) and the director of the USOTC have endorsed this research as a potentially positive contribution to the programs at the USOTC and have offered their support to obtain information from the resident athletes.

Last year (1993) was a unique year at the Olympic Training Center because it is the beginning of the quadrennial leading to the 1996 Summer Olympic Games in Atlanta, Georgia. Therefore, many of the athletes now in residence at the training center may have been just embarking on their elite athlete careers. This study provided rich information about the career and identity development of

elite athletes because there was a wide diversity among the resident athletes who participated in this study.

Contextual Information

The resident elite athletes at the Olympic Training Center were generally within the age range of 16 to 34 years and were engaged in active training for their specific sports for approximately six hours a day. They have been selected by their national governing bodies (NGBs) as having the most promise to compete in world and Olympic competition and are sponsored jointly by the respective NGBs and the Olympic Training Center. The athletes below the age of 18 are enrolled in local public high schools, and those over 18 attend local colleges, have completed their degrees, or work part time. Few have chosen to defer their academic plans completely (i.e., have only completed high school and not gone further), but many are on part-time educational plans, depending on the season(s) in which they are most active with their sport. In relationship to a "normal" time frame for completing educational endeavors, many of the athletes are behind schedule.

Little reference in the literature expounds upon the education elite athletes attain when they travel abroad frequently to compete internationally and engage in a pressure-filled lifestyle on a daily basis. The lessons they learn from these experiences can be referred to as transferable skills, or skills that are learned from the

sport involvement that will serve them well when they are no longer actively involved in elite level competition. Skills such as goal setting, time management, ability to accept critical feedback, ability to manage success and failure, respecting cultural diversity, making and adhering to commitments, and learning self-control are examples of skills that most elite athletes learn over the course of their competitive careers, but often these qualities are not taken into consideration when researchers write about elite athletes and their development. Part of the reason is because the skills noted are often referred to as micro-skills and are not necessarily readily operationalized. But in the general context of human development, they are important skills that should not be overlooked, particularly in regard to the psychosocial and career developments of elite athletes.

Theoretical Framework

Developmental psychology provides the general context from which this research is conducted. Developmental psychologists posit that development, both quantitatively and qualitatively, is a continuous, complex, directional, and irreversible process (Papalia & Olds, 1975). Development always proceeds from simple to complex and from general to specific, thus evolving in processes guaranteeing both stability and change in life patterns.

Developmental theorists and researchers are concerned with the life cycle and its elements, life stages. Stages are a convenient use of language depicting units of congruent functioning within time periods as well as change over time, but stages are not necessarily age related. Inherent in the stage conceptualization is the idea that each successive stage presupposes effective completion of the proceeding ones. If a stage is not completed, or is insufficiently completed, the deficiency reverberates through all of the successive stages (Harris, 1974). Stage transitions may be defined in part by the emergence of new behavioral capacities and by changed expectations in the socialization process.

Within each stage there usually are developmental tasks, and successful completion of these tasks are necessary for a person's continued psychosocial growth and adjustment.

Havighurst (1953) described a developmental task as

a task which arises at or about a certain period in the life of an individual, successful achievement of which leads to happiness and success with later tasks, while failure leads to unhappiness in the individual, disapproval by society and difficulty with later tasks. (p. 6)

Identity formation is an important developmental task usually occurring during late adolescence and early adulthood.

Locacio (1964) identified three basic patterns for mastering developmental tasks. In the continuous development pattern, the individual proceeds in the manner expected by society, for example, by mastering the learning and behavioral change successfully at the time it expected. In

the delayed developmental pattern, the individual masters the developmental task later than normally expected. Individuals exhibiting the impaired developmental pattern never successfully master the developmental task and are thereafter maladjusted in varying degrees (Zaccaria, 1965).

Developmental theorists suggest that individuals move progressively from dependence to independence by acquiring skills necessary to perform adequately in ways valued by others. As an individual gains cognitive abilities that permit abstraction from generalization, the individual moves from a "now" to a "future" orientation. And, as the individual moves from immediate to delayed gratification in affective and impulsive life, the individual increasingly selects and commits to social as well as refined personal goals (Harris, 1974). Maturity, then, is the range and relative proficiency of available knowledge and skills (Papilia & Olds, 1975).

The construct of career (or vocational) maturity (CM) has its origins in developmental psychology. Career maturity is focused on life stages as well as developmental tasks and is represented by the behavior of the individual in handling the developmental tasks with which the individual is actually coping (Super, 1957). Career maturity spans several dimensions, including (a) consistency of career choice over time, (b) attitudes about work itself, (c) involvement and independence of the individual in the choice process, and (d)

ability to assess personal abilities and preferences, and to match them with occupational requirements (Ganster & Lovell, 1978). Career maturity has been found to be positively correlated with commitment to work (Nevill & Super, 1988).

For elite athletes, high levels of commitment commonly accompany the athlete's participation in a sport and related exercise activities. Many individuals ascribe much psychological significance to their involvement in elite athletics (Eldridge, 1983) and identify strongly with the athlete role. Athlete identity, defined as the degree to which an individual identifies with the athlete role, is an important construct to research for both theory and application (Brewer et al., 1993).

Given the level of commitment demanded by elite athletics, there has been speculation that elite athletes are susceptible to identity foreclosure (Nelson, 1983). Identity foreclosure occurs in individuals who have not engaged in exploratory behavior but who still have made (possibly premature) commitments to occupation or ideology (Marcia, 1966). These individuals have not allowed for an exploration of their internal needs and values; instead, they have conceded to the demands of their environment and adopted a socially acceptable role identity. Thus, they have avoided an identity crisis and gained a sense of safety and security, but they have done so at the expense of their personal

freedom and opportunities for growth and creativity (Petitpas, 1978).

Career Development

Super (1980) has studied and researched vocational development extensively from a life span perspective. Occupational choice, from his developmental perspective, is considered a process as opposed to an act. Thus, career development is an evolutionary process that is flexible and in which individuals adapt their occupational choices to change conditions in their lives (Vacc & Loesch, 1987). Super suggested that his theory is a segmental theory (Super, 1974) or loosely defined set of theories addressing specific aspects of career development taken from developmental, differential, social, and phenomenological psychology held together by self-concept or personal construct theory (Super, 1984). Three components of Super's work are well recognized in vocational developmental theory: life stages and their associated developmental tasks, career maturity, and self-concept. These concepts are expounded upon in Chapter 2.

Identity Development

Ego identity and identity diffusion (Erikson, 1956) refer to polar outcomes of the hypothesized psychosocial crisis usually occurring in late adolescence. Erikson viewed this phase of the life cycle as a time of growing occupational and ideological commitment. Facing imminent adult tasks such as getting a job and becoming a citizen, the

individual is required to synthesize childhood identifications in such a way to both establish a reciprocal relationship with society and maintain a feeling of personal continuity (Marcia, 1966).

Marcia's identity statuses. Marcia expanded on Erikson's theme of identity development by operationalizing ego identity formation into four statuses or modes of resolution: (a) identity achievement, (b) moratorium, (c) foreclosure, and (d) identity diffusion. Degree of crisis and commitment are used to categorize an individual in a particular identity status (Kacerguis & Adams, 1980). Kacerguis and Adams (1980) summarized Marcia's identity statuses well by stating that identity achievement individuals have gone through a period of crisis and have made commitments to an occupation and ideology based on their own evaluations. Moratorium individuals are currently undergoing a period of crisis and are in the process of making formal commitments and values. Identity diffusion individuals have made no commitments and are not experiencing a crisis. Individuals in foreclosure status have encountered no crisis but have adopted commitments and values of others (e.g., their parents or significant role models).

The term identity foreclosure was first used by Erik Erikson in 1956 in a chart in which he expanded his diagram of the psychosocial development of people (Petitpas, 1978). Identity foreclosure typically occurs in the secondary school

age period when the major developmental tasks involve gaining a sense of industry versus inferiority and making various work identifications rather than foreclosing prematurely on a work identity. Erikson never fully explicated the term, and the term does not reappear in the literature until Marcia (1966) devised a method of classifying college men according to ego identity status based on Erikson's earlier work. Marcia interpreted Erikson as requiring "all individuals to synthesize childhood identifications in such a way that [s]he can both establish a reciprocal relationship with his [her] society and maintain a feeling of continuity within him [her] self" (Marcia, 1966, p. 552). Marcia believed that in order for individuals to achieve their unique identities successfully it is necessary for them to experience crisis in the form of being forced to choose from a series of meaningful alternatives. Marcia (1966) postulated that by exploring the nature of a person's commitments and by examining the presence or absence of crisis, it would be possible to determine the person's ego identity status (Petitpas, 1978).

Marcia (1966) contended that individuals in a state of identity foreclosure would be distinguishable by not having experienced a crisis and yet having expressed a commitment. They would identify strongly with authoritarian beliefs, and more often than not be living out the goals or intentions that their parents (or significant role models) have

expressed for them (Petitpas, 1978). Marcia (1966) stated that "a certain rigidity characterizes his [her] personality; one feels that if [s]he were faced with a situation in which parental values were nonfunctional, [s]he would feel extremely threatened" (p. 554).

Statement of the Problem

It has been implied, but not fully established, that elite athletes are vocationally immature, developmentally delayed, and tend to be identity foreclosed in regard to their identity statuses (Blann, 1985; Kennedy & Dimick, 1987; Petitpas, 1981; Petitpas & Champagne, 1988). Therefore, the primary problem addressed in this study is that differences in career maturity and presence of an athletic identity between elite athletes and nonathletes are unknown. Also unknown are differences in career maturity and presence of an athletic identity as functions of ego-identity status and gender both within and between groups. And finally, unknown are the relationships among career maturity and presence of athletic identity and age, years in competitive sport (elite athletes only), years of education, and parents' (i.e., family) annual income both within and between groups.

Need for the Study

As noted, the career maturity and ego-identity statuses of elite athletes are unknown. Elite athletes, particularly ones trying to attend school or who have part time jobs, must endure tremendous demands mentally, physically, and

emotionally. Chickering (1969) wrote about development with a specific focus on the college years (ages 18-25). These years are seen as a time when the completion of certain developmental tasks is prerequisite for healthy adult functioning. As a result of the additional demands placed upon the athletes, it has been suggested that personal development in educational skills, educational career planning, and career mobility may have been hindered as a result of athletic participation (Blann, 1985; Sowa & Grissard, 1983).

As a result, there is a movement towards specialized career education programs in various athletic communities, such as universities and by the USOTC. However, because the career maturity and ego-identity statuses of elite athletes have not been well studied, it is necessary to gather more data to determine if elite athletes are, in fact, developmentally delayed and career immature. With such knowledge, exceptions to general theoretical principles of development may be needed. The information also would be useful to various athlete counseling program administrators, and counselors may need special training to accommodate the unique needs of elite athletes.

Purpose of the Study

The major purpose of this study was to investigate career maturity and presence of athletic identity among elite athletes and nonathletes. In addition, these variables were

investigated in regard to the independent variables of ego-identity status, age, gender, years in competitive sport (elite athletes only), years of education, and parents' annual income. Both questionnaire and interview data were collected and analyzed to fulfill the purposes of the study.

Rationale for the Approach

A comparative study between four groups (male/female, athlete/nonathlete) was conducted using a demographic questionnaire and three pencil-and-paper, self-report instruments that measured CM, identity status, and presence of athletic identity, respectively. Additionally, in-depth interviews were conducted to develop a profile of elite athletes, as well as provide possible explanations for the quantitative information collected. This approach was selected over others because of its widely accepted use among researchers and practitioners for assessing these constructs. Moreover, the instruments were highly reliable and valid, and the interviews were an efficient way to facilitate the compilations of career and identity development profiles of elite athletes.

Hypotheses

The following null hypotheses were evaluated in this study:

Ho 1: There are no differences in level of career maturity as functions of athletic status, ego-identity status (interpersonal and ideological), or gender.

Ho 2: There are no significant interactions among athletic status, ego-identity status (interpersonal and ideological), or gender for level of career maturity.

Ho 3: There are no differences in presence of athletic identity as functions of athletic status, ego-identity status (interpersonal and ideological), or gender.

Ho 4: There are no significant interactions among athletic status, ego-identity status (interpersonal and ideological), or gender for presence of athletic identity.

Ho 5: There are no statistically significant relationships between presence of athletic identity and age, years in sport, years of education, or parents' annual income for elite athletes.

Ho 6: There are no statistically significant relationships between presence of athletic identity and age, years of education, or parents' annual income for nonathletes.

Ho 7: There are no statistically significant relationships between career maturity and age, years of education, or parents' annual income for elite athletes.

Ho 8: There are no statistically significant relationships between career maturity and age, years of education, or parents' annual income for nonathletes.

Definition of Terms

The following definitions are used in this study:

Career maturity is operationally defined herein as the score derived by subtracting the exploration score from the establishment score on the Adult Career Concerns Inventory (ACCI, Super et al., 1988). The score for each subject will range from -5 to +5, with +5 being the highest score achievable for career maturity.

Career resources are available means for career exploration, such as books, computers, and knowledgeable people.

Ego-identity status is one of four possible identity levels (moratorium, diffusion, foreclosure, and maturity) as defined by the scores derived from the Extended Objective Measure--Ego-Identity Status (Bennion & Adams, 1986). The inventory yields scores for each of the four ego-identity statuses, with the highest score determining the identity status of the subject.

Nonathlete is used herein to mean a person for whom athletic participation is not a primary life role. These persons may engage in athletic activities at an "informal" (i.e., extracurricular) level but do not participate at the intercollegiate or elite levels as described previously. These persons will be "friends" of the elite athletes and will have been identified as such by the various elite athletes.

Parents' annual income is the collective amount of money per annum that is earned by the parents of the subjects of the study. The amount is to be rounded out to the nearest \$1,000 and will be self-reported by the subjects of the study on the demographic questionnaire.

Presence of athlete identity is a single score derived from the Athlete Identity Measurement Scale (AIMS, Brewer et al., 1993) based on a 7-point, Likert-type scale that determines the degree to which the subject identifies with the role of athlete. The range of scores is 7 to 70.

Resident elite athlete is an athlete who resides at the USOTC and who was selected based on the rules developed by the NGB of the subject's sport. Usually the athlete must be competing consistently at the senior national level in order to be considered elite by the NGB. The athlete is jointly sponsored by the NGB and the USOTC in order to live and train at the USOTC.

Overview of the Remainder of the Study

As presented in Chapter 1, a comparison of elite athletes and nonathletes in regard to identity status, presence of athletic identity, and career development will be conducted. In addition to empirical data collected for this comparison, interviews will be conducted to facilitate the development of a profile that will describe the elite athletes' identity and career development patterns relative to those of nonathletes.

Presented in Chapter 2 is a review of the related literature. The methodology is explained in Chapter 3, and the results are presented in Chapter 4. A concluding discussion, summary, and recommendations for future research comprise Chapter 5.

CHAPTER 2 REVIEW OF THE RELATED LITERATURE

The concepts of identity and career development are integral to this study. Identity development is presented from the framework of Erikson and Marcia while career development is presented from the framework of Super.

Identity Development

The construct of identity has been defined in a variety of ways. For the purposes of this study, identity refers to the central means by which someone defines him/herself, including the predominant role to which one is committed.

Erikson

Erikson's (1959) epigenetic theory of psychosocial development provides part of the theoretical underpinnings for this study. His model is perhaps the most definitive ego-identity model and shaped many subsequent identity development models. The Eriksonian model of psychosocial development is based on the assumption that as people age, they progress through a series of developmental stages. Erikson viewed development as not only progressing structurally within the person but also as shaped and characterized by the relationships formed (Perna, 1991).

Erikson outlined stages of childhood, adolescent, and postadolescent development, and each is characterized by developmental "crises" (i.e., tasks that must be accomplished). At each of these stages, an underlying conflict must be resolved in order to complete successfully the stage. Stages are influenced by previous stages, and the current stage influences later stages (Erikson, 1959). Unless the developmental tasks at each stage have been mastered, successful completion of the next life stage will be impaired. Thus, incomplete, or insufficiently completed, tasks manifest themselves as problems later in life.

Erikson proposed eight stages encompassing development over the lifespan, with each stage characterized in terms of polarities of ego qualities (Perna, 1991). Ego qualities were described as basic attitudes that developed in consequence to the interaction between the developing competencies of the individual and the pressures and sanctions of the social environment. The time frame and the developmental tasks include (a) infancy--trust versus mistrust, (b) early childhood--autonomy versus shame/doubt, (c) play age--initiative versus guilt, (d) school age--industry versus inferiority, (e) adolescence--identity versus role confusion, (f) young adulthood--intimacy versus isolation, (g) adulthood--generativity versus self-absorption, and (h) old age--integrity versus despair.

The construct of identity is the focal developmental task of this study and can be defined as the establishment of a personal self, i.e., who a person perceives him/herself to be (Erikson, 1959; Marcia, 1966). Identity achievement requires the individual to have exercised previously obtained capacities and to have made committed choices based on an internal rather than an external frame of reference (Perna, 1991).

Marcia

Marcia's (1966) theory of ego-identity status expounded upon Eriksonian theory of identity development by operationalizing ego identity formation into four statuses or modes of resolution: (a) identity achievement, (b) moratorium, (c) foreclosure, and (d) identity diffusion. The success of identity formation is based on the nature of the crisis period. The levels of ego-identity formation define how an individual is adjusting to the crisis and conflict of ego-identity formation (Marcia, 1966).

According to Marcia (1967), during adolescence youth undergo two crucial experiences: "crisis" and "commitment." Crisis is defined as a period of active engagement with alternatives and choice. It is "a turning point, a crucial period of increased vulnerability and heightened potential and, therefore, the ontogenetic source of generational strength and maladjustment" (Marcia, 1967, p. 118). Commitment is a relatively stable condition in which the

individual's energy is available for action. Commitment may or may not be a result of a crisis experience.

Marcia originally employed a qualitative approach in an effort to assess the nature and quality of the resolution of the identity crisis. Marcia interviewed subjects and assessed identity status according to three criteria:

1. What is the degree of commitment to an occupation or ideology?
2. Was the commitment preceded by a crisis?
3. Did an external versus an internal frame of reference characterize choices?

Identity achieved individuals were characterized by a stable and internally referenced degree of commitment to occupational and ideological choices that had been determined after a period of exploration. Moratorium individuals were actively engaged in an exploratory process and had not yet committed themselves to occupational or ideological choices, although they relied on an internal frame of reference. Identity foreclosed individuals displayed a similar degree of commitment and stability as identity achieved individuals, however, their choices lacked exploration, and often depended on external frames of reference (e.g., significant others or parents). Orlofsky et al. (1973) found identity foreclosed individuals needed less autonomy and had a higher need for social desirability. And finally, identity diffused

individuals lacked commitments, were externally focused, and were not actively engaged in exploration of their identity.

In studies that followed Marcia's initial work on ego-identity status, it was found that identity achievement and a grounded sense of self were necessary before true intimacy with others occurred (Kacerguis & Adams, 1980; Lowenthal & Weiss, 1976; Orlofsky et al., 1973). This information provides credence for the notion in Eriksonian theory that completion of one stage necessarily effects the completion of following ones.

Rothman (1978) conducted an investigation in an effort to test the epigenetic principle of Erikson's theory of psychosocial development and to determine the relationships among psychosocial crisis resolution and ego-identity statuses. The study was correlational, including discriminant analyses that allowed for identification of psychosocial crisis predictor variables which significantly distinguished identity statuses. Positive correlations were found between autonomy and identity achievement. This finding was in accord with that of Waterman et al. (1970) who found that subjects characterized as relatively high in ego-identity were significantly more internal on the Rotter (1966) Internal-External dimension than those who were lower on the identity-identity diffusion continuum. Waterman et al. (1970) also found significant relationships between identity and autonomy. Marcia (1967) found foreclosure and

diffusion subjects to be significantly more vulnerable to experimental manipulations of their self-esteem than identity achievement and moratorium subjects. Thus, the findings in the study by Rothman (1978) provide support for Erikson's theory of psychosocial development, as well as demonstrate additional convergent and discriminant validity of Marcia's ego-identity concept.

The study of human development reveals some general principles. However, while they apply to large segments of the population, they are by no means universal. The concepts related to these principles have been characterized with the adjectives "modal," "normative," and "nomothetic" if the concepts relate to a large proportion of the population (Zaccaria, 1965). The idiographic dimension of development needs to be considered also. Zaccaria (1965) suggested that developmental tasks have an idiographic dimension in that the tasks vary from person to person because (a) a given task has a unique meaning to each individual, (b) individuals differ with respect to their general approach to developmental tasks, and (c) different patterns of mastering developmental tasks are found among individuals, such as the continuous developmental pattern, the delayed developmental pattern, and the impaired developmental pattern (LoCasio, 1964). As the general task is internalized, it is interpreted by the individual and incorporated into a personal value, need, or attitude system, therefore, having a unique meaning for each

person. Among the factors influencing the general approach people adopt towards development would be personal factors such as age, gender, temperament, values, attitudes, and cultural values as reflected in socio-economic class. The developmental task can be approached eagerly or hesitantly, methodically or casually (Zaccaria, 1965)

Women and Development

Eriksonian theory has been criticized as being paternalistic in nature (G. Gonzalez, personal communication, 1992; Wass, 1991). Many developmental theories were devised based on a white male population, and their validity with women and certain minority groups has been questioned. However, Gilligan (1982) delineated the moral and psychological development of women based on extensive interviews with men and women from the ages 6 to 60. More specifically, the identity development and intimacy issues were addressed by Gilligan and were found to take different paths in women and men. Based on women's self-descriptions, a fusion of identity and intimacy is clearly articulated. Identity is defined in the context of relationships and judged by a standard of responsibility and care. Women consistently use terms such as giving, helping, caring, being kind, and not hurting others in referring to themselves. Therefore, women often define themselves and their identity in relationship to others, not as free-standing agents.

According to Hotelling and Forrest (1984), the nature of identity is clearer and more distinct and direct in men than in women. Men connote separation by categorizing themselves as intelligent, logical, creative, and honest. In a sense, men create a nonrelationship to define their individual identities. They describe themselves as different from others to illustrate and underline their identities. In women, identity and intimacy are fused at an early age, so the critical experience is one of separating self from others so that a woman is aware of responsibility to self as well as to others (Hotelling & Forrest, 1984). As Boyce (1985) suggested, women negotiate several developmental tasks concurrently, thus complicating the "separate stage" theory of development.

While it is likely that men and women develop in different ways, there is yet to be fully developed an empirically testable model of women's development. Therefore, although there are limitations to the inventories that will be used in this investigation based on certain theories of psychosocial development, they are currently the only ones available to conduct this kind of research. Also, the Marcia (1966) theory of ego-identity statuses, on which the EOM-EIS-2 is based, has not met with the same criticisms of paternalism as Eriksonian psychosocial development theory. It is a theory based more on commitment to certain occupations and ideologies, whether exploratory behavior was

demonstrated, and whether there was an internal or external frame of reference for the decisions made. There are also well-established norms for both men and women for each of the inventories that will be used for this study, so this should offset some of the theoretical criticism.

Career Development

Career development is a continuous process, generally divided into the three main components of self-assessment, career exploration, and career implementation. Super's (1957) theory of career development has been credited as one of the most influential theories developed within vocational research (Hackett, Lent, & Greenhaus, 1991).

The three well-recognized components of Super's theory include life stages and their associated developmental tasks, career maturity and self-concept.

Life stages. According to Vacc and Loesch (1987), Super (1957, 1977) proposed five major life stages, each incorporating different developmental tasks that can be used to understand career development. The first stage, **growth**, lasts from birth to approximately age 14. It includes the substages of **fantasy** (ages 4-10), **interest** (ages 11-12), and **capacity** (ages 13-14). The important developmental tasks in this stage are developing a self-concept and establishing an orientation toward the world of work. **Exploration**, the second stage, covers approximately ages 14-24, with the substage, **tentative**, existing approximately

from ages 15-17. The primary developmental tasks in the **exploration** stage are crystallizing a vocational preference, specifying the preference, and implementing the preference. The third stage, **establishment**, lasts from approximately ages 24-44 and includes the substages of **stabilization** (ages 25-30) and **advancement** (ages 30-44). The major developmental tasks in this stage are stabilizing the vocational preference and advancing in occupations.

Maintenance, the fourth stage, lasts from approximately ages 44-64. The major developmental task in this stage is preserving achieved status and gains. In the final stage, **decline**, lasting from approximately age 64 on, there are two substages: **deceleration** (ages 64-70) and **retirement** (ages 70-on). The major developmental tasks in this stage are decelerating occupational activities and disengaging and retiring from occupational activities (Vacc & Loesch, 1987).

Vocational self-concept. The vocational self-concept develops through mental and physical growth, observations of work, identification with working adults, interaction with the general environment, and general experiences (Zunker, 1981). Individuals make career selections based on their vocational self-concepts. Therefore, understanding personal values and preferences is important in making a career selection.

Career maturity. The concept of career maturity (CM) implies that "specific behaviors are indicative of an individual's mastery of developmental tasks" (Vacc & Loesch, 1987, p. 135). Super (1957) suggested that there are two points of reference in determining career maturity. In the first, the person's chronological age indicates the life stage in which, on a normative basis, the person should be found and hence the developmental tasks with which the person should be confronted. The person's actual life stage in relation to expected life stage provides a basis for judging CM. The behavioral repertoire that the individual has available for coping with developmental tasks confronted, regardless of whether they are the tasks considered appropriate for that age or expected life stage, is the second. In assessing CM, consideration must be given to orientation to vocational choice, information and planning about preferred occupations, consistency of vocational choices, crystallization of traits, and wisdom of vocational preferences.

Beneath the broad arc of life stages lay the roles fulfilled during the course of a lifetime. The construct of a life space contains the spectrum of roles the individual plays and can be defined as the combination of roles played in life (Super, 1980). Such roles can continue from one life stage into the next or can terminate when a life stage is completed.

Super (1980) referred to four major domains in which the individual roles may be found. He called them the "four principle theatres" which consisted of the home, community, school, and workplace. Any number of roles can exist in a domain. Generally, a role exists in one domain, but roles may be present in other domains. Any two roles played in the same domain may cause conflict between the roles (Super, 1980). This conflict may occur because of the nature of the roles themselves. Roles are dependent on the expectations and performances of the observers and players of the roles (Super, 1980). In addition, roles are mediated by developmental tasks. Thus, the emphasis on certain roles is a function of the needs and demands placed on an individual during a life stage (Super, 1980).

The Life-Career Rainbow (Super, 1980) demonstrates how the two personal variables of career maturity and self-concept affect career development. Career maturity can be observed by the choices a person makes at critical decision points in the Life-Career Rainbow. Decision points occur when a role is beginning, changing in a dramatic way, or terminating. Selecting or changing a career are examples of decision points in life (Super, 1980).

The self-concept is how one views oneself and the behaviors or decisions made by the individual that verify this conceptualization. Super (1982) suggested that the self-concept develops over the life span. The self-concept

is partially developed by identifying with parents and peers, as well as learning about ourselves as individuals. Part of the formation of the self-concept involves various "role plays" in which an individual tries out different beliefs and values that are consistent with particular career choices (Osipow, 1983; Super, 1980). Thus, the self-concept is maintained in career-related behaviors.

Identity and Career Development

There is considerable interdependence between the developmental concepts of developmental tasks, vocational developmental tasks, and psychosocial crises. Davis (1965) and Bell (1968) studied the relationship between ego identity and vocational choice, and Hershenson (1967) and Rosenfield (1972) investigated the relationship of ego identity to occupational choice. The findings of these investigations indicated that ego identity is a promising variable in the study of vocational behavior (Munley, 1975). Munley (1975) investigated the relationship between psychosocial development and vocational choice behavior and development in 123 male college students between the ages of 18 to 21. The Crite's (1969) diagnostic system of classifying vocational choices was employed to determine if vocational choices were adjusted, maladjusted, multipotential, undecided, uninterested, unrealistic, unfulfilled, or coerced. This study revealed that individuals who showed adjusted vocational choices demonstrated higher levels of psychosocial

development across Erikson's first six stages than did individuals with problem vocational behavior. Individuals with problem vocational choices were less successful in resolving Erikson's stage crises. Individuals in the undecided group appeared to be in the midst of an identity crisis and had made little progress in positively resolving the crisis. They were confused about their identity, and this sense of identity confusion may have had a negative effect on earlier basic stage resolution attitudes (Munley, 1975).

The effects of having an unrealistic, unfulfilled, coerced, or uninterested choice are seemingly not as immediate or disruptive as having no choice at all. The effects of having an unrealistic, unfulfilled, coerced, or uninterested choice may appear at a later time, for example, when the individual realizes that [s]he does not have the aptitude or interest in the chosen vocation, or when the chosen vocation (e.g., athletics) is not providing the financial security expected.

The findings in regard to career maturity show that career maturity has a strong linear relationship with all stage crises resolutions. If a person is high in career maturity, then [s]he tends to demonstrate more successful resolution in all the stage crises (Munley, 1975).

In a more recent study, Savickas (1985) tested the hypothesis ($n = 143$ college freshmen and sophomores) that

vocational identity relates to progress in ego identity formation and degree of vocational development. Vocational identity was defined as "the possession of a clear and stable picture of one's goals, interests, and talents" (Holland, Gottfredson, & Power, 1980). It was found that vocational identity related to other developmental variables and vocational identity had a moderate association with both vocational development and ego identity (Savickas, 1985). Vocational identity associated most with the task of crystallizing tentative preferences and progressively less with the other tasks in the vocational development continuum (Savickas, 1985).

Blustein, Devenis, and Kidney (1989) stated that two prevalent developmental tasks emerge consistently across various theoretical approaches when examining the process by which individuals crystallize and specify vocational goals. One task involves the exploration of self and the external environment (Harren, 1979; Stumpf, Colarelli, & Hartman, 1983; Super, 1957a). The second major developmental task, commitment to career plans, has generally been associated with the process of exploration (Harren, 1979; Super, 1957a).

Blustein et al. (1989) sought to assess (a) the nature and extent to which career exploration is related to other aspects of exploration in late adolescence and (b) the nature and extent to which the occupational commitment process is related to the establishment of a coherent personal or ego

identity (n = 99 college students). They discovered that the exploration and commitment processes that characterize identity formation are closely related to an analogous set of career development tasks (Blustein et al., 1989). This information is consistent with information provided by previous research (e.g., Grotevant & Thorbecke, 1982; Munley, 1975; Savickas, 1985).

Blustein et al. (1989) also found that differences in exploratory activity are related to the way in which individuals resolve the identity versus identity diffusion psychosocial task. Exploratory activity in the vocational domain is related to the more far-reaching exploration that characterizes the moratorium and identity-achieved statuses and is inversely associated with the diffusion status. Thus, individuals who are engaged in environmental and self-exploration also tend to be involved in a broader process of seeking information related to the various dimensions of their identities. Therefore, career exploration may provide a means for individuals to learn about themselves in ways that may be relevant to other important aspects of personality development (Blustein et al., 1989; Grotevant & Cooper, 1988).

An Historical Perspective of Sport

The belief that sport provides "training for life" has its roots in the turn-of-the-century movement to legitimize athletics and physical education. It has been assumed that

through sports, children learn good sportsmanship and other values and skills necessary in a competitive society (Danish, Petitpas, & Hale, 1990). Also, sports participation was viewed as an important means of maintaining social control over children. For many decades, the philosophy prevailed that through sports participation youth could be taught to accept the norms and rules of the existing culture, use their free time constructively, and conform to the status quo (Danish et al., 1990).

The Olympic Games have become the most powerful expression of international sport since Pierre de Coubertin founded the modern Olympic Movement in the late 1800s. To de Coubertin, the Olympic Games represented the institutionalization of an ideal that extolled sport as a moral and social endeavor. He advocated amateur sport as being the most viable vehicle for inculcating children with appropriate values (Segrave, 1988). His vision was derived from a synthesis of ideas that he drew from both classical Greek and a 19th-century English public school conception of sport. Although he initially enlisted these ideas in support of a social reform platform directed against his native France, he ultimately internationalized his thinking to generate a philosophy that placed sport at the center of a universal campaign for peace and international understanding. He called the social reform "Olympism" (Segrave, 1988).

The definition of Olympism proposed by the International Olympic Committee (IOA), which governs the Olympic Games, states that

Olympism is an overall philosophy of life, exalting and combining in a balanced whole the qualities of body, will, and mind. Olympism sets out to create a way of life based on the joy of effort, the educational values of good example and a respect for universal fundamental principles. (Segrave, 1988, p. 151)

Olympism's emphasis on the explicit pursuit of social values distinguishes the Olympic movement and the Olympic Games from all other sports institutions. No other international sports event was specifically designed to serve as a vehicle for social improvement or to contribute to the "general welfare and betterment of humanity" (de Coubertin, 1967, p. 39) across the globe. These features of Olympism have also served to enhance the enormous appeal and popularity of the Olympic Games themselves (Segrave, 1988).

The ideals and realities of sports movements such as the Olympic Games have certainly clashed in recent years, given the enormous commercialism that has evolved from the movements. Economics has become the guiding factor both to producing a Games by the host country and to the athletes who hope to parlay their participation in the Games into financial reward and security. The concept of amateurism only exists in theory in the Olympic Games because most Olympic athletes have established trust funds and receive endorsement and appearance money as well as support from the

United States Olympic Committee (USOC) on a monthly basis. Given the economic potential of the Games for the athletes, problems have arisen (e.g., use of steroids or political decisions to boycott the Games) that have tainted the ideals of the Olympic Games and resulted in disillusioning experiences for many competitors.

Identity and Career Development Among Athletes

Psychosocial development involves the ritualization of life stages where the task is a "rite of passage" and a ritual is formed around this task. Participation in sport can be a way of ritualizing ego-identity formation. To claim oneself as an athlete is to define an identity. The risk is that the ideological nature of ego-identity formation and its rituals can become so all-encompassing that the identity task is not completed (Erikson, 1959).

In part, identity formation is a process of commitment to roles individuals may have tried or a commitment to other people. According to Erikson (1982),

A pervasive sense of identity brings into gradual accord the variety of changing self-images that have been experienced during childhood . . . and the role opportunities offering themselves to young persons for selection and commitment. (p. 72)

Sport in American society undeniably holds great status among people of all ages. It is a major source of entertainment and provides heroes for the young and old (Repucci, 1987). From the highest paid professional athletes, to the quadrennial Olympic extravaganzas, to the

weekend competitors, sport permeates many levels of consciousness (Baillie, 1990). The dreams of many youngsters evolve from watching their sports heroes and participating in sporting events. They, too, want to attain the enviable status of being sports celebrities. Eitzen (1984) stated,

Sport is such a pervasive activity in contemporary America that to ignore it is to overlook one of the most significant aspects of society. It is a social phenomenon which extends into education, politics, economics, art, the mass media, and even international diplomatic relations. Involvement in sport, either as a participant or in more indirect ways, is almost considered a public duty by many Americans. (p. 9)

The participation in sport by young participants has important implications for social, personal, and physical development. Developmentally, the major task for the adolescent is to gain a sense of achievement, autonomy, and initiative (Baillie, 1990; Newman & Newman, 1979). Leadership skills may be enhanced by sports participation as more athletic children are likely to be seen as leaders (Ambron & Brodzinsky, 1979). Early participation may then lead to accomplishing certain developmental tasks while associating status or sense of self with sports participation (Baillie, 1990; MacPherson, 1980). Athletic children may be viewed and treated differently.

Baillie (1990) provided an excellent summary of the literature on the specific influences of sport participation on the development of self-esteem, self-concept, personal control, competency, and moral development in youth

participants. Koocher (1971) found that the learning of a specific athletic skill can directly enhance the self-concept. The focus of the investigation was instructional swimming, and it was found that individuals who acquired this new physical skill showed increased self-concept. Similarly, Kay, Felker, and Varoz (1972) investigated boys in junior high school and discovered that those individuals with higher levels of athletic competence showed an enhanced level of self-concept. Sonestrom (1982) supported these findings and further suggested that fitness training is often interpreted by the participant as a measure of success and a growth in competency (Baillie, 1990). Fitness training, even without being specific to a particular sport, can enhance self-esteem (Sonestrom, 1982) and lead to a sense of increased personal control and competency (Duke, Johnsen, & Nowicki 1977).

Involvement in sport and its effects on moral development also have been investigated. Bredemeier and Shields (1986a, 1986b) found that the egocentric nature of sports participation was reflected in the responses of some athletes. They suggested that the unique conditions of sports promoted egocentric thought and that for male athletes, this shift was also seen in nonsports moral reasoning (Baillie, 1990). Perhaps these results reflect that male athletes identify with sport more than female athletes. The gender differences may be related to the

differential emphasis that is placed upon male involvement in athletic pursuits (Baillie, 1990; Kleiber & Kane, 1984).

The motives for sport participation of youths aged 8-19 years was investigated by Gould and Horn (1984). They concluded that children enjoy sports because of the potential for improving skills, having fun, playing with friends, experiencing certain thrills and pleasures, achieving and maintaining a level of fitness, and achieving success in a socially desirable realm. Gould (1987) further noted that children continue their involvement in sports until such time as their motives are no longer being satisfied. Often when children move into adolescence, the pressure of sports achievement becomes greater. When this occurs, there may be a shift from internal motives to external motives, such as entitlement or status (Baillie, 1990). However, when the motives become external, they become more volatile and susceptible to public scrutiny. In essence, the athlete transforms from a private to a public sense of self. Csikszentmihalyi (1975) suggested that internal motivation is more likely to be positive and durable.

At the high school level, athletic participation has been shown to have further effects on development (Baillie, 1990). Using cross-sectional data, Schendel (1965) found that 9th- and 12th-grade male athletes had higher ratings of psychosocial maturity than same-grade nonathletes. Focusing on athletics also has been found to hinder the academic

performance and college preparation of high school athletes (Hauser & Lueptow, 1976; Landers & Landers, 1978). Landers and Landers (1978) also reported that failure in sports may accelerate the movement of an individual towards delinquent behaviors.

It has been speculated and empirically supported that college student-athletes and elite athletes are susceptible to identity foreclosure (Petitpas, 1981). Petitpas distinguished between two types of identity foreclosure: (a) psychological foreclosure and (b) situational foreclosure. Psychologically foreclosed individuals tend to be more rigid in their selection of career because of a perception of threat from a career choice and choose "safe" options that are acceptable to their parents or significant others who influence them (Petitpas, 1978). Situationally foreclosed individuals fail to choose from career options because of lack of experience or exposure to alternatives (Petitpas, 1978). Elite athletes are likely to fall into the latter category of identity foreclosure. Petitpas and Champagne (1988) suggested that athletes may foreclose on an identity because of the rigid environment to which athletes, particularly high level ones, are exposed. Severe constraints are placed upon athletes because such large proportion of their physical and psychological energies are devoted towards their sports. For example, in Petitpas' (1981) research on 278 intercollegiate male student-athletes,

he found that senior athletes displayed a relatively greater degree of Foreclosed Identity thinking than senior nonathletes.

Research by other investigators comparing athletes and nonathletes also has demonstrated evidence of identity foreclosure. For example, athletes have been found to lack autonomy and intraception (Booth, 1958; Kane, 1968; Ogilvie & Tutko, 1971). Further, various groups of athletes have demonstrated high authoritarian thinking (LeUnes & Nation, 1983; Petitpas, 1981), unrealistic educational and career plans and low career maturity (Blann, 1985; Kennedy & Dimick, 1987; Neyer, 1989; Sowa & Grissard, 1983), high conventional thinking (Schendel, 1965), and stereotyped sex role expectations (Hirt, Hoffman, & Sedlacek, 1983).

There is also the still-prevalent environment of an authoritarian coach figure who tends to believe that athletes need to be devoting all of their energies toward their athletic endeavors. Such coaches believe outside interests would be too distracting to the athletes and would negatively affect their athletic performances. This viewpoint has been criticized recently in a study of elite national champion figure skaters. The study revealed that a primary source of pressure reduction for the elite athletes was to have interests outside of their sport that allowed them to gain a different perspective about their sport involvement (Gould, Jackson, & Finch, 1992). Many of the

athletes in that study indicated that they were able to repeat as national champions because they were able to "get away" from their sport outside of the rink, so that they were better able to focus on their performances when necessary. They were not "putting all of their eggs in one basket," so they were better able to relax and enjoy their sports performance and did not feel as though their entire self-worth was ensconced in their athletic performance (Gould et al., 1992).

Several authors have suggested that individuals with a strong (and exclusive) athletic identity are vulnerable to emotional difficulties when they experience an injury that impairs their ability to perform in their sport or exercise activity (Baillie, 1992; Brewer et al., 1993; Deutsch, 1985; Eldridge, 1983; Heyman, 1986; Ogilvie, 1989; Pearson and Petitpas, 1990). An athletic injury, particularly a career-threatening injury, may disrupt the self-identity of an individual with a strong and exclusive athletic identity. When the athlete lacks other sources of self-worth and self-identification, it is possible they are at increased risk for depression and other emotional difficulties (Brewer et al., 1993). At the age of 36, Chris Evert, a famous female professional tennis player, retired after 18 years on the pro circuit. She recalled,

I had no idea who I was, or what I could be away from tennis. I was depressed and afraid because so much of my life had been defined by my being a

tennis champion. I was completely lost. (Ebert, 1990, p. 86)

It is possible that individuals who have a strong athletic identity do not have an exclusive athletic identity. Linville (1987), in a proactive study, examined the impact of self-complexity (i.e., the extent to which individuals cognitively organize information about themselves in terms of many distinct self-aspects) on depression. It was found that individuals low in self-complexity were more prone to depression following high levels of stressful events than individuals high in self-complexity (Linville, 1987). This is an area that needs more research in regard to athletes.

Preparation for the Transition Out of Sport

One area of study with collegiate and elite athletes that has gained attention within recent years is that of the experience of transition out of sport. Part of this research includes career planning as a primary variable that affects transition. Perhaps the most often sighted research in the area of athletes and career planning was done by Kennedy and Dimick (1987). They investigated career maturity in 122 male football and basketball players at a midwestern university. They found that the career maturity level of male, intercollegiate scholarship student-athletes was no higher than that of average ninth grade students (Kennedy & Dimick, 1987). It was also reported that 66% of the Black athletes and 39% of the White athletes "expected" to play professional sports, despite the generally accepted statistic that less

than 2% of all intercollegiate athletes progress into professional sports (Harris & Eitzen, 1978; Underwood, 1980). Kennedy and Dimick (1987) suggested that their findings demonstrate that athletes in revenue-producing sports "may be unprepared to take advantage of one of the most highly valued aspects of the college experience--the initiation and development of viable vocational plans" (p. 296).

In another study regarding career planning and athletes, Blann (1985) found that freshman and sophomore male athletes from a sample of both Division I and Division III schools had poorly formulated career plans as compared to nonathletes. Neyer (1989) also found that freshmen male and female intercollegiate student-athletes from a southern Division I university were significantly less career mature than their nonathlete counterparts.

Studies of emotional and functional adjustment out of athletics have been undertaken by several authors in recent years. Greendorfer and Blinde (1985) investigated the transition of intercollegiate athletes out of their sport in a retrospective study 697 female and 427 male athletes (42% and 38% response rates, respectively). The authors found a trend towards the decreasing significance of sports and the increasing significance of education as the athletes moved through the collegiate system. While over 80% of the male and female samples had rated sports as "very" or "extremely" important in their freshman year, the figures were 20% lower

in the senior year (Baillie, 1990; Greendorfer & Blinde, 1985). Moreover, the importance of education rose from 50% for the males and 70% for the females in the freshman year to 70% and 80%, respectively, in the senior year. The importance of social life did not significantly change, ranging between 60% and 70% for both genders in both time periods (Baillie, 1990; Greendorfer & Blinde, 1985). The information found in this study did not specifically account for the athletes who possibly went on to professional sports, so it is unknown whether this shift also occurs in those athletes. However, Greendorfer, and Blinde (1985) stated that

these data suggest concurrent shifts in three dimensions of an athlete's life: sport, education, and social life. Indirectly, these data may not only be suggesting that sport retirement is a transition (rather than event), but they may be portraying the multidimensionality and complexity of the sport retirement process. (p. 107)

In two studies of elite athletes in transition, Baillie (1990; personal communication, 1992) discovered that planning ahead for retirement and developing new options for a life after sports were found to be significant factors in the positive adjustment of many athletes. Results showed a significant relationship between levels of planning and preparation and the level of later emotional adjustment to retirement. The same relationships were found with levels of functional adjustment. Baillie (personal communication, 1992) stated that this pattern suggested that athletes who

were able to look ahead and to begin to take steps toward their eventual retirement tended to have smoother and more effective transitions to retirement.

Baillie (personal communication, 1992) also found that having "unfinished business" in sports, such as unattained goals or career-ending injuries, was significantly related to lower scores on functional adjustment to athletic retirement and had difficulty moving into new careers or developing new goals outside of sports. These findings concur with those of Hinitz (1988) who studied retired intercollegiate gymnasts. Also, Werthner and Orlick (1986), in a study of former Canadian Olympic athletes, supported the notion that individuals with an alternative area in which to direct energies and commitments were able to make the transition out of the athlete role more effectively than individuals without such alternatives.

In one of the rare longitudinal studies conducted on Division I male basketball players ($N = 38$), Adler and Adler (1985) found that most athletes had entered college with optimistic and idealistic attitudes towards their future. Several experiences within the athletic, social, and academic realms led to increasing disenchantment and disengagement from education (Baillie, 1990). Academic success became less salient as they moved through the university, apparently as a result of the "system" rather than the individual (Adler & Adler, 1985). This disenchantment with the "system" has been

noted by several authors over recent years (Neyer, 1989; Underwood, 1980; Wittmer, Bostic, Phillips, & Waters, 1981). As Wittmer et al. (1981) stated, terms such as "exploitation" and "gladiators" have been used in conjunction with intercollegiate student-athletes. In many cases, college coaches recruit the best athletes with little regard for their academic abilities, character, or intelligence. As a result, many athletes never receive a college education because emphasis is placed on "remaining eligible" and not necessarily on moving towards a degree (Wittmer et al., 1981).

Underwood (1980) provided perhaps the most poignant story of the way intercollegiate student-athletes are "used" by the "system." This article produced serious concern among the National Collegiate Athletic Association (NCAA) and began the process of reform among intercollegiate institutions, as the NCAA developed stricter guidelines for student-athletes, coaches, and the staff involved with the student-athletes in regard to recruiting and academic requirements.

It is questionable whether elite athletes develop dysfunctional "athletic identities" (Brewer et al., 1993) as a result of devoting too much time and energy toward athletic endeavors. Thus, the negative effects may have been overstated. For example, Blann (1985) stated that no significant differences were found between female athletes and nonathletes and that developmental differences between

intercollegiate athletes and nonathletes disappeared by the senior year of college. A review of Kennedy and Dimick's (1987) results tables by Perna (1991) suggested a similar trend, although Kennedy and Dimick chose not to include age as a variable in their statistical analyses.

Based on the research conducted by Blann (1985), Greendorfer and Blinde (1985), and Kennedy and Dimick (1987), it appears that freshmen and sophomore intercollegiate student-athletes are heavily invested in the role of athlete, possibly to the detriment of their personal and career developments. However, there also seem to be trends that suggest that differences between athlete and nonathlete populations largely disappear by the senior year. Therefore, the research must be carefully scrutinized to see if special programs for athletes are warranted within athletic systems or if the "problems" that occur tend to correct themselves as the athletes' experience growth over the course of their athletic and academic careers.

There also is evidence that many methodological and interpretive errors were made when studies such as these were conducted, thus bringing into question the validity of information from previous research. For example, no studies controlled for socioeconomic differences, and Lee (1983) and Kennedy and Dimick (1987) were the only researchers who included race as a variable. Moreover, Perna (1991) noted that ceiling effects of the measuring instruments had not

been accounted for in conclusions regarding developmental status which had been identified as relevant in prior studies comparing athletes and nonathletes (Hauser & Lueptow, 1978; Stevenson, 1975). And finally, the most frequently used measure of psychosocial development, the Student Developmental Task Inventory (STDI-2) (Winston, Miller, & Prince, 1979), utilized in prior studies with athletes had been found to possess serious psychometric flaws thus rendering it of little use to researchers in studying the process of student development (Perna, 1991).

Support for Need of the Study

Thus far, nearly all of the research on athletes with regard to identity and career development has been done on student-athlete populations. The subjects of much of that research have been all-male populations, and frequently, they were intercollegiate football or basketball players. The methodological flaws within some of the previous research brings into question the validity of the information provided by the investigations. Therefore, different conceptualization and approach to the investigation of identity and career development in elite athletes are necessary in order to have better information about them.

Summary

Recent history has brought forth the question of the value sport truly holds in regard to the development of

people. It has been speculated that involvement in sport at high levels either builds character or produces character disorders. Successful athletes are expected to behave as role models, both on and off the playing fields, which may produce yet another source of pressure for some athletes. The athletes' identities become more and more defined by their participation in sports (MacPherson, 1980). Athletes often refer to the public scrutiny they receive after successes and failures as "growing up in a fishbowl." Their privacy is hampered by the invasive behavior of the media and fans. The athlete is pressured into "creating an identity" for the media in an effort to win public (and economic) favor. While this is a strain for many athletes, it is also a level of exposure that quickly disappears when the sports career is over, as the athlete is quickly cast aside and forgotten by the fickle public (Ogilvie & Howe, 1982).

Transiting out of sport can be extremely difficult, particularly for those athletes who have not engaged in career development behavior beyond their sports. There are questions regarding the concern many sports organizations have for the athletes as well-rounded people and not just as athletes. Have they created a system in which the athletes unidimensionally define themselves based on their athletic performance? Are elite athletes developmentally delayed, career immature, and suffering from exclusive athletic identities? What needs to be done, if anything, to

facilitate the identity and career developments of elite athletes?

CHAPTER 3 METHODOLOGY

This study was an investigation comparing resident elite athletes and nonathletes on measures of career maturity, identity status, and presence of athletic identity. These variables also were investigated in regard to variations in them as functions of selected demographic characteristics.

Relevant Variables

The primary variables measured in this study included career maturity, ego-identity status, and presence of athletic identity. Career maturity is defined as both an age and behavior related construct. The person's actual life stage in relation to expected life stage provided a basis for determining career maturity. Ego-identity status refers to determining ego identity formation into four statuses, including identity diffusion, achievement, moratorium, and foreclosure. Presence of athletic identity refers to the degree to which an individual identifies with the athlete role.

Other variables being assessed include age, gender, race, years in competitive sport (elite athletes only), education, and the parents' annual income. The parents'

annual income was assessed by self-report, rounding the figure to the nearest \$1,000.

Populations

The United States Olympic Training Center (USOTC), located in Colorado Springs, Colorado, is a training site for approximately 100 resident elite athletes. The athletes live in "dorms" located on the campus of the training center. The environment is similar to that found at a small residential college or university. They eat in a cafeteria on campus, train in the facilities on campus or in the local area, and have full access to the on-campus sports medicine and exercise science clinics. Also located on the campus is the Olympic House, which houses the executive director of the United States Olympic Committee and the staff required to run the Olympic Committee and its programs.

The athlete population to which this research is relevant are elite athletes within the United States, particularly those living at the USOTC. The athletes' ages range from 16 to 34 years old. They have come to the USOTC from all over the United States. They also have a wide range of educational backgrounds, from those who have yet to complete a high school education to those who have completed undergraduate and graduate degrees. Psychological characteristics generally considered pertinent to resident elite athletes include high achievement motivation, resilience, determination, and goal orientation.

The nonathlete population is a comparable group of persons whose primary distinguishing feature (in the context of this study) is that they are not athletes in the commonly accepted sense of the term. That is, the nonathlete population consists of friends of the elite athletes. Presumably, the nonathletes have backgrounds and demographic characteristics similar to those of the elite athletes. For example, they were in the 18- to 34-year-old age range, have similar gender and race proportions, and have similar educational and familial (i.e., parents' annual income) levels.

Sampling Procedures

Representative samples were taken from both the elite and nonathlete populations in this study. The procedures for sampling these populations is described in the following paragraphs.

Elite Athletes

The researcher received permission from the USOTC director to request that the resident elite athletes participate in this study in the spring of 1993. It was requested that the athletes complete the packet of questionnaires and someone was designated to pick up the packets the following day, or the packets were returned to the office of the experimenter at the convenience of the athletes. One other possibility was that the athletes would

complete the questionnaires as a group prior to their practice times, or at a time convenient for them as a group.

The elite athlete interviews were conducted in the office of the experimenter at the convenience of the subject, and recorded on audiotape. The interviews were used to further explicate the quantitative findings, as well as try to develop a profile of identity and career development of elite athletes.

Nonathletes

The nonathlete subjects were selected using the method of friendship propinquity, more commonly known as "snowball" sampling (Johnson, Boster, & Holbert, 1989). An iterative procedure was used. Initially, each elite athlete was asked to identify, and provide the addresses for, two "friends" who (a) they have known for a period of at least two years, (b) are of the same gender, (c) are of the same race, and (d) are (or were) not intercollegiate or elite level athletes. It was anticipated that at least 150 "friends" (i.e., two per elite athlete) would be identified through this procedure.

The nonathlete potential participants received the same demographic questionnaire and instruments that were given to the elite athletes and a request to complete them as part of the study. The demographic questionnaire and instruments in each of the packets distributed to the nonathletes were differentially "coded" (using nonnumeric identifiers) so that

the demographic questionnaires and instruments were disassembled and later reassembled.

The means for age, parents' annual income, and years of education for the elite athletes was computed, as were the proportions by gender and race among them. Upon receipt of materials from the nonathletes, their demographic questionnaires were separated from their instruments. Next, a sample equivalent in size (i.e., number) to that for the elite athletes was created by random selection from among the nonathletes' demographic questionnaires. Then, means and proportions were computed for the initial nonathlete sample as they were computed for the elite athlete sample. Analyses of differences between the respective groups' means and proportions were performed to determine if there were statistically significant differences. Since no significant differences were found, the demographic questionnaires initially selected became the nonathlete sample.

Resultant Sample

The sample included the resident elite athletes and a comparison group of nonathletes obtained from snowball sampling. The respondents from both groups were at least 18 years old. Currently, there are just under 100 athletes at the USOTC, and the researcher was able to obtain information from the majority of the eligible athletes over the age of 18 ($N = 72$). Similarly, it is expected that a comparison group equaling or surpassing the numbers collected from the

experimental group will be obtained. The interviews were conducted with 20 of the elite athletes. The total number of research participants was 171 subjects (72 athletes/99 nonathletes).

Data collection required 3 months by the time questionnaires were completed and interviews were conducted. The interviews lasted for approximately 30 minutes and were semistructured.

A copy of the methodology section of this research proposal, a description of the informed consent procedure, and the requisite forms were submitted for review and approval to the University of Florida Review Board. Sampling began when final approval was obtained.

Assessment Techniques

Data were collected through administration of the Adult Career Concerns Inventory (ACCI; Super et al., 1988), the Extended Objective Measure of Ego-Identity Status (EOM-EIS; Bennion & Adams, 1986), and the Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993). Semistructured interviews were conducted with the elite athletes to explicate further the information they provide.

ACCI. The ACCI assesses career maturity by providing information on four different scales, or stages, using a 5-point, Likert-type scale: (a) Exploration, (b) Establishment, (c) Maintenance, and (d) Disengagement. Each scale contains three subscales. Of primary concern was the

Exploration and Establishment scales (and their respective subscales) because career maturity is defined (in terms of the ACCI) as the score derived by subtracting the Exploration score from the Establishment score. There are 61 items on the inventory, 15 for each stage (5 for each substage), and one topic question. The range of scores for career maturity was -5 to +5, with +5 reflecting the highest achievable score for career maturity. Each subscale contains five questions, with possible answers being assessed 1 to 5 points. The weighted sum is calculated for each subscale, and an average for that subscale is determined. The weighted sums for the subscales are totaled and averaged into a single score for that particular stage, or scale.

For the purposes of this investigation, only the first 30 questions were used because they comprised the Exploration and Establishment stages. Subscales included in the Exploration scale include Crystallization, Specification, and Implementation. The subscales for the Establishment scale include Stabilizing, Consolidating, and Advancing. The norms for the exploration scale for females ages 18-24 include a mean of 3.54 with a standard deviation of 0.79. For females ages 25-34 the mean is 3.13 with a standard deviation of 1.01. For males ages 18-24 the mean is 3.17 with a standard deviation of 0.75. For males ages 25-34, the mean is 3.18 with a standard deviation of 0.84.

The norms for the Establishment scale for females ages 18-24 include a mean of 3.38 with a standard deviation of 0.78. For females ages 25-34 the mean is 3.45 with a standard deviation of 0.78. For males ages 18-24 the mean is 3.65 with a standard deviation of 0.79. For males ages 25-34, the mean is 3.23 with a standard deviation of 0.77.

The ACCI reliability coefficient alphas for the scales and subscales are in the .80s and .90s. The coefficient alpha for the Exploration scale is .92 (S.E.M.= 2.7) and for the subscales of Crystallization, Specification, and Implementation obtaining are .81 (S.E.M.= 2.0), .87 (S.E.M.= 1.9), and .87 (S.E.M.= 2.0), respectively. The coefficient alpha for the Establishment scale is .92 (S.E.M.= 3.3) and for the subscales of Stabilizing, Consolidating, and a Advancing are .89 (S.E.M.= 1.8), .82 (S.E.M.= 1.8), and .87 (S.E.M.= 1.5), respectively.

The validity of the ACCI is based on research dating to the inception of the concept of career maturity by Super et al. in 1957. That research provided the basis for scale definitions and item writing. The scales were subsequently refined empirically and logically (Super & Overstreet, 1960), thus producing content validity. The Career Development Inventory, Adult Form, was an experimental form of the ACCI, but the decision was made to use the term "concerns" in order to avoid the implications of linearity common to the notion of development (Super & Kidd, 1979). The differences between

experimental forms and the final ACCI are negligible, relating only to minor changes in items and response scales. The CDI has high reliability (test-retest = .82) and content validity, criterion-related, and construct validity. It is relatively stable over a 6-month period, with stability coefficients ranging from .63 to .71 (Thompson, 1984). Therefore, it can be assumed the ACCI is similarly reliable and valid.

The ACCI is based on whether a respondent has yet faced and completed a developmental task, combined with the importance of that task or concern, and with the use of an appropriately different scoring system (Super et al., 1988).

AIMS. The AIMS is a 10-question inventory having a 7-point, Likert-type response scale for each item. It yields a single score for each item between 1 and 7 indicating the strength (or centrality) of the athletic identity of the subject. The range for the scale is 10 to 70, with a higher score indicating greater presence of athletic identity in the respondent.

Internal consistency of the AIMS was established as a coefficient alpha of .93 in three studies with a subject pool of over 800 subjects who were both athletes and nonathletes (Brewer et al., 1993). The test-retest reliability coefficient for the AIMS was .89, indicating the stability of the inventory over a 2-week period.

Construct validity was established by determining how the AIMS correlated with measures of similar constructs. The AIMS results were correlated positively with the Perceived Importance Profile (PIP; Fox, 1987), which is a similar measurement scale. The correlation of the AIMS to the "Importance of Sport" subscale in the PIP was .83. A two-factor (sex X level of athletic involvement) ANOVA provided further support for the validity of the AIMS. There was a significant main effect for level of athletic involvement, $F(3, 242) = 91.89, p < .0005$. Mean scores increased with level of athletic involvement.

The AIMS was also compared to Self-Role Scale (Curry & Weiss, 1989), the Sport Orientation Questionnaire (Gill & Deeter, 1988), and the Self-Esteem Scale (Rosenburg, 1965). Brewer et al. (1993) concluded that the AIMS was a useful measure of athletic identity that correlated with the Self-Role Scale, $r = .61, p < .005$ but still measured distinct constructs. No significant relationship was found between the AIMS and the Self-Esteem Scale. Based on these studies, the AIMS is a valid instrument for assessing the construct of athletic identity.

EOM-EIS 2. The EOM-EIS 2 (Bennion & Adams, 1986) is a 64-item scale having a 6-point, Likert-type response scale for each item. It is the third, and most recent, revision of an instrument based on Marcia's (1966) incomplete sentence blank that assesses four levels of identity status: (a)

achievement, (b) moratorium, (c) foreclosure, and (d) diffusion. It measures ego-identity status in ideological domains (occupation, politics, religion, and philosophical lifestyle) and in interpersonal domains (friendship, dating, sex roles, and recreation). Each subject received scores for each of the levels of identity status, but the highest score in each domain (interpersonal and ideological) was used to determine the status for that subject in each of those domains.

Cronbach alpha coefficients indicate good to strong internal consistency for all subscales for both the ideological and interpersonal identity domain measures. The coefficient alphas for the ideological domain measures of achievement, moratorium, foreclosure, and diffusion are .62, .75, .75, and .62, respectively. Similarly, for interpersonal measures of achievement, moratorium, foreclosure, and diffusion they are .60, .58, .80, and .64, respectively.

There also is evidence of concurrent and predictive validity of the inventory. Concurrent validity was assessed by correlating the subscales of the EOM-EIS 2 with the identity measure developed by Rosenthal et al. (1981). According to Bennion and Adams (1986), the findings are that (a) the identity achievement subscales of the EOM-EIS 2 are positively correlated with the Rosenthal et al. measure of identity (Pearson correlations = .38 for ideological and .47

for interpersonal identity, $p < .001$), (b) the diffusion, moratorium, and foreclosure subscales of the EOM-EIS 2 are negatively correlated with the Rosenthal measure of identity (Pearson correlations = $-.44$, $-.50$, and $-.17$ for ideological diffusion, moratorium and foreclosure, and $-.25$, $-.36$. and $-.04$ for interpersonal diffusion, moratorium, and foreclosure, $p < .001$) (c) identity achievement is positively correlated ($.33$ ideological, $.47$ interpersonal, $p < .001$), diffusion ($-.44$ ideological, $-.42$ interpersonal, $p < .001$), foreclosure ($-.30$ ideological, $p < .001$) and moratorium ($-.29$ ideological, $-.30$ interpersonal, $p < .001$) is negatively correlated with reported levels of intimacy, (d) foreclosure is correlated with authoritarianism ($.33$ ideological, $.23$ interpersonal, $p < .001$) and diffusion ($-.21$ interpersonal, $p < .05$) is negatively correlated with this construct, and (e) identity achieved subjects tended to be more rigid than other identity status respondents in their attitudes and opinions.

Predictive validity was established by determining identity status group differences on the measures of general identity and intimacy as measured by the subscales of the Rosenthal et al (1981) assessment. For both ideological and interpersonal identity, the identity achievement status group was consistently higher on reported general identity and intimacy on the Rosenthal et al. measure. Likewise, diffusion and foreclosure identity status groups were observed as consistently scoring less high on identity and

intimacy. The moratorium status group scored toward the middle or lower end of the continuum for both identity and intimacy behaviors.

And finally, factorial validity is evident in the EOM-EIS 2. A factor analysis provided evidence for three basic factors. Relatively pure factor structures were observed for the identity achievement and the foreclosure subscales. However, diffusion and moratorium were found to load on a common factor. This suggests that diffusion and moratorium are interrelated (Bennion & Adams, 1986).

Interviews

Interviews were conducted in an effort to obtain richer (i.e., more subjective and in-depth) information than is provided by the quantitative data. Bliss, Monk, and Ogborn (1983) suggested using qualitative information as a supplemental strategy to quantitative data collection by stating,

Perhaps the main claim made by those whose data are essentially qualitative is that only such data respect the complexity, subtlety, and detail of human transactions. Without wishing to polarize positions between kinds of data, it seems to us arguable that an analysis of qualitative data which does not capture such complexity, subtlety and detail loses much of what the data offer. (p. 3)

The interviews were semistructured and designed to elicit information that elucidated the quantitative information gathered. The total number of subjects interviewed was determined after the inventories were completed and it was decided how many subjects would reflect

a representative sample. Twenty athletes were interviewed and 10 were analyzed. Questions the subjects were asked included the following:

1. What has been the nature of your involvement in sport over the course of your life? (identity development)
2. What are your goals and aspirations in your sport? (commitment to sport)
3. What do you think life would be like for you if you could no longer compete? (centrality of athletic identity)
4. What have you done in regard to career exploration? (career exploration/planning)
5. What potential careers have you considered for after you complete your competitive career in sport? (career planning)
6. What will you have to do to implement your career choice(s)? (world of work information)
7. How has your family influenced your career choices? Do you expect to go into the same or a similar field as your parents? (identity foreclosure)
8. Other than family members, who has influenced your career development, and how? (identity, career planning)

Quantitative Analyses

An Interactive Statistical Program (ISP) file was developed to analyze the data from this investigation. The probability level of $p = .05$ was used for rejection of the null hypotheses. The primary data analytic technique used

was stepwise multiple regression. For each of the dependent variables (i.e., career maturity and presence of athletic identity), correlational relationships were determined using athletic status, ego-identity status, and gender. These regression analyses allowed for evaluation of hypotheses 1 through 4. Pearson product-moment correlation coefficients were computed between age, years of education, and parents' annual income and career maturity and presence of athletic identity, respectively, to evaluate hypotheses 5 and 6. Similarly, correlation coefficients between age, years of education, and parents' annual income and career maturity and presence of athletic identity, respectively, were computed to evaluate hypotheses 7 and 8.

Qualitative Data Reporting

The interviews were analyzed by intuitive content analysis. Content analysis involves identifying coherent and important examples, themes, and patterns in the data (Patton, 1987). Also examined and reported were significant quotations or observations and examples of underlying ideas, issues, and concepts.

Response "categories" were created for each of the eight main interview questions. The response categories represented global differentiations among the possible responses that could be provided. For example, for question one, "What has been the nature of your involvement in sport over the course of your life," the proposed response

categories were (a) low involvement initially, then a relatively dramatic shift to high involvement, but a pattern of constantly increasing involvement; (b) a pattern of constantly increasing involvement; and (c) always a high level of involvement. A category of "unclassifiable response" also was allowed for each question.

For the second question, "what are your goals and aspirations in your sport," the response categories were (a) I just like doing the sport, I do not have any particular goals; (b) I hope to compete in high level national and international competition; and (c) I want to make the Olympic team and win Olympic medals and will do whatever it takes to accomplish that.

For the third question, "what do you think your life would be like for you if you could no longer compete," the response categories were (a) it would be alright, I would move on to other life plans; (b) it would be disappointing, and it would be hard for me to adjust to life without sport; and (c) it would be the worst thing that could happen to me, I would have no idea what I would do without sport in my life.

For the fourth question, "what have you done in regard to career exploration," the response categories were (a) little or nothing; (b) I have done some career exploration activities and have talked to a couple of people about it; and (c) I have done a considerable amount of exploration,

talked to several people about it, and I will probably pursue

For the fifth question, "what potential careers have you considered for when you complete your competitive career in sport," the response categories were (a) I have not considered career options after I complete my career in sport; (b) I have thought about a few things but have not really come up with a plan; and (c) I have decided I will pursue _____, and I am already involved with this career decision because of my work in the area of _____.

For the sixth question, "what will you have to do to implement your career choice(s)," the response categories were (a) I would not know how to go about it; (b) I would find out more about how much, if any schooling I would have to do to implement it, or if I could learn the choice "on the job"; and (c) I have already found out that I would have to _____ in order to implement my career decision.

For the seventh question, "how has your family influenced your career choices, and do you expect to go into the same field as your parents," the response categories were (a) they have not influenced my choices about careers; (b) they have suggested I consider _____ because they have enjoyed their careers in that field; and (c) I am expected to

go into _____ because my parents think that would be best for me.

And for the eighth question, "other than family members, who has influenced your career development, and how," the response categories were (a) no one; (b) my coach; or (c) someone through school or work.

Reliability and validity of qualitative data can be thought to be credible if the data represent what the researcher was attempting to study (Stainback & Stainback, 1988). Generally speaking, positivistic and empirical approaches to reliability are not relevant to data collected using qualitative methods. Researchers bring to an investigation different backgrounds and interests that are likely to influence the design and interpretation of the study (Stainback & Stainback, 1988). However, reliability of the data can be enhanced by having other investigators draw their own conclusions from the interview information collected in an effort to obtain interrater reliability and agreement. Therefore, 10 (i.e., approximately half of the 20) of the audiotapes of the elite athlete interviews were randomly selected and listened to by a counseling professional not otherwise involved in the study. This counseling professional was asked to code/classify the responses to each question using the same categories as used by the researcher. Subsequently, interrater reliability

(.90) and agreement coefficients were computed to validate the accuracy of the researcher's interpretations and coding.

The goals of the qualitative inquiry in this research were to provide information that helps to explain the findings from the quantitative data and to develop a profile of the career and identity development of elite athletes. It was meant to be supplementary information; therefore, its credibility was less likely to be suspect given that there was empirical information as well.

Fieldwork and interviews have limitations, and it is important that a researcher avoid certain errors in the collection of data. Erikson (1986) listed the essential features that must be present in any report of interpretive, qualitative data. Erikson discussed five major types of evidentiary inadequacy: (a) inadequate amounts of evidence, (b) inadequate variety of kinds of evidence, (c) faulty interpretive status of evidence, (d) inadequate disconfirming evidence, and (e) inadequate discrepant case analysis. He further described that a report should contain nine essential elements: (a) empirical assertions, (b) analytic vignettes, (c) quotes from fieldnotes, (d) quotes from interviews, (e) synoptic data reports, (f) interpretive commentary framing particular description, (g) interpretive commentary framing general description, (h) theoretical discussion, and (i) report of the natural history of inquiry of the study. Baillie (1990) summarized Erikson's (1986) beliefs by stating

that these elements allow the reader to experience the setting, to survey the evidence, and to consider the author's theoretical and personal bases to the perspective which he or she offers on the quantitative data (Erikson, 1986).

Reliability of the information collected in the interviews was established by two types of triangulation (Denzin, 1978). The first type was investigator triangulation. A counseling professional who was not otherwise involved with this study was asked to classify the responses to each question using the categories established by the researcher. An agreement coefficient of .90 was found between the independent counseling professional and the primary investigator in this study.

The second type of triangulation used to establish reliability of the information was methodological triangulation. Multiple methods of investigation were used to derive a profile of the elite athlete in regard to career maturity, ego-identity status, and presence of athletic identity. Three reliable and valid inventories were completed by the athletes and nonathletes, and interviews were conducted with the athletes. Therefore, it can be assumed that the information derived from this study is reasonably reliable.

CHAPTER 4 RESULTS

Reported in this chapter are the data and data analyses derived for this study in which differences in career maturity and identity development between elite athletes and nonathletes were investigated. The independent variables were gender, age, years of education, years in competitive sport, parents' annual income, and ego-identity status (both interpersonal and ideological). Ego-identity status was measured by the Extended Objective Measure of Ego-Identity Status (EOM-EIS; Bennion & Adams, 1986). The dependent variables, career maturity and presence of athletic identity, were measured by the Adult Career Concerns Inventory (ACCI; Super et al., 1988) and the Athlete Identity Measurement Scale (AIMS; Brewer et al., 1993), respectively.

Interviews also were conducted with a sample of elite athletes in an effort to facilitate description of career and identity development among elite athletes. The interviews were analyzed by intuitive content analysis; response categories were created for each of eight main interview questions. The interviews yielded information supplementary to the quantitative information collected.

Descriptive Data

Data were collected from 171 subjects, 72 (42.1%) athletes and 99 (57.9%) nonathletes. The nonathletes were selected using the method of friendship propinquity, or "snowball" sampling (Johnson, Boster, & Holbert, 1989). The sample was predominantly white (91.2%, N=156; 6.4%, black, N=11; and 2.3% hispanic, N = 4) and male (63.5%, N=112; 52 athletes, 60 nonathletes) while 34.5% (N=59; 20 athletes, 39 nonathletes) were female (see Table 1).

Table 1

Demographics of Sample by Gender and Race

Athlete						Nonathlete					
Male			Female			Male			Female		
W	B	H	W	B	H	W	B	H	W	B	H
47	4	1	18	1	1	57	3	0	34	3	2

There was not a significant difference in the distribution across status (athlete/nonathlete) based on gender, chi-square (1) = .11, $p > .05$. In regard to the subjects' highest level of educational attainment, 5.8% (N=10) had a high school diploma only, 49.7% (N=85) had some college, 31% (N=53) had a college degree, 9.4% (N=16) had some graduate school, and 4.1% (N=7) had attained a graduate

degree. There was no significant difference in the distribution of educational attainment between athletes and nonathletes, chi-square (4) = .23, $p > .05$. In regard to marital status, 90.1% (N=154) were single and 9.9% (N=17) were married. The mean parents' annual income (to the nearest thousand) for the subjects was \$61,000. The mean age for subjects was 23.5 years old, while the range was 18 to 34 years old. The mean number of years the elite athletes had been participating in their sport was 10.9 years. Analyses were not conducted on the basis of race because of insufficient sample sizes for the black and hispanic groups. A description of the sample is summarized in Table 2.

Analyses by Hypotheses

The probability level for the rejection of an hypothesis was set at $p = .05$.

Hypothesis One

Ho 1: There are no differences in level of career maturity as functions of athletic status, ego-identity status (interpersonal and ideological), or gender.

This null hypothesis was not rejected. Stepwise multiple regression was used to determine which combination of variables correlated significantly with career maturity scores from the ACCI. None of the variables correlated significantly with ACCI scores. Also, there were no significant differences on the bases of these demographic variables. The mean scores for the ACCI for athletes was

Table 2

Summary Table of Means for Respondent Characteristics by Demographics, ACCI, and AIMS Scores

	Athletes		Nonathletes	
N	72		99	
AGE	23.80		23.39	
ED	Some College		Some College	
PAI	\$69,540		\$55,930	
ACCI	-.1068		-.0186	
AIMS	50.79		39.98	
YRS IN SPORT	10.9		NA	

	Males	Females	Males	Females
N	52	20	60	39
AGE	23.80	23.80	24.07	22.71
ED	Some College	Some College	Some College	Some College
PAI	\$68,561	\$72,062	\$53,174	\$63,000
ACCI	-.1465	-.0035	-.0527	-.1612
AIMS	51.69	48.45	39.20	41.55
YRS IN SPORT	10.96	10.84	NA	NA

-.1068, while the mean score for nonathletes was -.0186. A t-test for independent samples was used to determine if there were differences in level of career maturity based on

athletic status. A t value of $-.79$ ($p = .430$) was calculated which was not significant.

A t -test for independent samples also was used to determine if there was a significant difference in level of career maturity based on gender. A t value of $-.01$ was calculated, and it was not significant.

Hypothesis Two

Ho 2: There are no significant interactions among athletic status, ego-identity status (interpersonal and ideological), or gender for level of career maturity.

The null hypothesis was not rejected. Once again, a stepwise multiple regression was used to determine if there were any statistically significant interactions between career maturity and the independent variables. No significant interactions were found among any of the independent variables in regard to career maturity scores from the ACCI.

Hypothesis Three

Ho 3: There are no differences in presence of athletic identity as functions of athletic status, ego-identity status (ideological or interpersonal), or gender.

The null hypothesis was rejected. A stepwise multiple regression was used to determine whether significant relationships existed among AIMS scores and the independent variables. As shown in Tables 3a and 3b, both athletic

status ($p < .001$) and gender ($p < .007$) were found to be significantly correlated with AIMS scores.

Table 3a

Stepwise Multiple Regression Analysis for AIMS Scores by Athletic Status and Gender

Variable	B	SE B	t-test	p-value
a	67.10	3.38	19.85	.001*
ATH STAT	-10.26	1.66	-6.19	.001*
GENDER	-4.73	1.72	-2.74	.007*

R-squared = .232

Adjusted R-squared = .222

F = 25.31

Significance of F = .000

DF = 2,168

* $p \leq .05$

Table 3b

Matrix of Simple Correlation Coefficients for AIMS by Athletic Status and Gender

Variable	ATH STAT	GEN	ATH STAT*GEN	AIMS
ATH STAT	1.00	.121	.68	-.44
GENDER	.121	1.00	.78	-.24
STAT*GEN	.683	.78	1.00	-.44
AIMS	-.444	-.24	-.44	1.00

A t -test for independent samples was used to determine if there was a significant difference in presence of athletic identity based on athletic status. A t value of 6.81 was significant at the .05 level, as displayed in Table 4. Athletes scored higher on presence of athletic identity than nonathletes.

Table 4

t-Test for Independent Samples for Differences in AIMS Scores Based on Athletic Status

Group	N	\bar{X} AIMS	S.D.	SE _M	F	t	p-value
ATH	72	50.79	8.48	.999	2.09	6.81	.001*
NA	99	39.98	12.26	1.233			

$p \leq .05$

* indicates significance

Significant differences in presence of athletic identity on the basis of gender also were found. A t -test for independent samples was used to determine significant differences in presence of athletic identity based on gender. A t value of 2.94 was significant at the .05 level, as displayed in Table 5. Males had significantly higher scores on the AIMS than did females. However, among the athletes, there were no statistically significant differences in the AIMS scores based on gender. Two-thirds of the variance in

this hypothesis is explained by the fact the subjects are athletes and have a significantly higher presence of athletic identity than nonathletes.

Table 5

t-Test for Independent Samples for Differences in AIMS Scores Based on Gender

Group	N	\bar{X} AIMS	S.D.	SE _M	F	t	p-value
MALES	112	46.61	10.59	1.00	1.67	2.94	.004*
FEMALES	59	40.60	13.70	1.78			

$p \leq .05$

Hypothesis Four

Ho 4: There are no significant interactions among athletic status, ego-identity status (ideological and interpersonal), or gender for presence of athletic identity.

The null hypothesis was not rejected. A stepwise multiple regression was used to determine which variables interacted significantly with AIMS scores. There were no statistically significant interactions among AIMS scores and the independent variables. Being an athlete and being male are significant in determining AIMS scores, but the interaction among these two variables (athletic status and gender) did not prove to be significant.

The AIMS scores were found to be at their maximum at 12.83 years of competitive sport involvement and then begins to decrease. This number was derived by differentiating the function to find the point at which the AIMS scores were highest.

Hypothesis Five

Ho 5: There are no statistically significant relationships between presence of athletic identity and age, years in sport, years of education, or parents' annual income for elite athletes.

The correlations of the data for hypotheses five through eight are presented in Table 6. No statistically significant correlations were found for any of these variables in regard to presence of athletic identity for elite athletes.

Hypothesis Six

Ho 6: There are no statistically significant relationships between presence of athletic identity and age, years of education, or parents' annual income for nonathletes.

As shown in Table 6, no statistically significant relationships were found for any of these variables in regard to presence of athletic identity for nonathletes.

Hypothesis Seven

Ho 7: There are no statistically significant relationships between career maturity and age, years of education, or parents' annual income for elite athletes.

Table 6

Pearson Product-Moment Correlations for AIMS and ACCI Scores by Athletic Status, Age, Education, Parents' Annual Income, and Years in Sport

	Athletes		Nonathletes	
	AIMS	ACCI	AIMS	ACCI
AGE	r=-.168 p= .158	r= .099 p= .409	r=-.018 p= .861	r= .277 p= .005*
YRS OF EDUC	r=-.129 p= .281	r= .068 p= .570	r= .093 p= .361	r= .299 p= .003*
PAI	r=-.106 p= .434	r=-.021 p= .875	r= .061 p= .579	r=-.111 p= .314
YRS IN SPORT	r= .066 p= .158	r= .142 p= .233	NA	NA

*p \leq .05

As shown in Table 6, no statistically significant relationships were found for any of these variables in regard to career maturity in elite athletes.

Hypothesis Eight

Ho 8: There are no statistically significant relationships between career maturity and age, years of education, or parents' annual income for nonathletes.

As shown in Table 6, the relationship between career maturity and age was significant ($r = .277$, $p < .05$) for this group. Older nonathletes demonstrated higher career maturity scores than younger nonathletes. Career maturity and years of education also were significantly correlated ($r = .299$, $p < .05$). The more years of education that nonathletes had completed, the higher their scores on the ACCI. The relationship between career maturity and parents' annual income for nonathletes was not statistically significant.

Interviews

Interviews were conducted with 20 athletes, from which 10 (6 men and 4 women) were randomly selected from the sample to be analyzed by intuitive content analysis. Response categories were created for each of the eight interview questions. The response categories represented global differentiations among possible responses.

Question one. What has been the nature of your involvement in sport over the course of your life?

Possible response categories included (a) low involvement initially, then a relatively dramatic shift to high involvement; (b) a pattern of constantly increasing involvement; (c) always a high level of involvement; and (d) an unclassifiable response. Seven of the 10 athletes interviewed indicated they had always been involved in sport on a high level (response "c"), while 3 said they followed a pattern of constantly increasing involvement (response "b").

Therefore, it appears that the elite athletes developed in environments that emphasized heavy involvement in sport.

Question two. What are your goals and aspirations in your sport?

Possible response categories included (a) I just like doing the sport, I do not have any particular goals; (b) I hope to compete in national and international competition; (c) I want to win national and international competitions, and make a Pan American/Olympic team (and medal there) and I will do whatever it takes to get there; and (d) unclassifiable response. Seven of the 10 athletes responded to this question by stating that they wanted to win national and international competitions and make the Olympic team (response "c"). Two indicated they just liked doing the sport and at the moment did not have any particular goals (response "a"), and one responded by stating that (s)he wanted to compete in national and international competitions (response "b"). Whereas most of the respondents were directed towards international and Olympic goals, two were uncertain as to the direction of their current athletic careers. (These last two subjects were a complex case because their sports were undergoing changes in rules and regulations. These subjects were uncertain whether they were going to commit themselves to the new rules, so their goals were reflective of that uncertainty.)

Question three. What do you think life would be like for you if you could no longer compete?

Response categories included (a) it would be alright, I would move on to other plans; (b) it would be disappointing, and it would be hard to adjust to life without sport; (c) it would be the worst thing that could happen to me, I would have no idea what I would do without sport in my life; and (d) an unclassifiable response. Seven of the athletes responded that it would be alright, that they would move on to other plans (response "a"), two stated that it would be disappointing and it would be difficult to adjust to life without sport (response "b"), and one stated that it would be the worst thing that could happen to him/her (response "c"). The seven respondents who said they would move on to other plans were emphatic about the need to be busy, competitive, and productive in their lives.

Question four. What have you done in regard to career exploration?

Response categories included (a) little or nothing; (b) I have done some career exploration activities and have talked to a couple of people about it; (c) I have done a considerable amount of exploration, talked to several people about it and I will (am) pursue (ing) _____; and (d) an unclassifiable response. Five of the respondents stated that they have done some career exploration activities and have talked to a couple of people about it (response

"b"), while four had made decisions regarding what they would be pursuing (response "c"). Only one had done little or nothing in regard career exploration.

Question five. What potential career have you considered for after you complete your competitive career in sport?

Response categories included (a) I have not considered career options for after I complete my career in sport; (b) I have thought about a few things but have not come up with a specific plan to explore or implement those choices; (c) I have decided I will pursue _____, and I am already involved with this career decision because of my work in the area of _____; and (d) an unclassifiable response. Five of the respondents said that they had thought about a few things but have not come up with a plan to explore or implement their choices (response "b"), four had made decisions about what they would pursue, and one had not considered what [s]he would do after completion of his/her sport career.

Question six. What will you have to do to implement your career choice?

Response categories included (a) I would not know how to go about it; (b) I would find out more about how much, if any, schooling I would have to do to implement it, or if I could learn about it on the job; (c) I have already found out that I would have to _____ in order to

implement my career decision; and (d) an unclassifiable response. Five respondents said they would have to find out about whether they would need more schooling or could learn about it on the job (response "b"), four stated they knew what they would have to do to implement their career choices (response "c"), and one was uncertain what would have to be done to implement any decision (response "a").

Question seven. How has your family influenced your career choices, and do you expect to go into the same (or a similar) field as your parents?

Response categories included (a) they have not influenced my choices about careers; (b) they have suggested I consider _____ because they have enjoyed their careers in that field; (c) I am expected to go into _____ because my parents think that would be best for me; and (d) an unclassifiable response. Eight of the respondents indicated that their parents have not influenced their career choices (response "a"), one was expected to go into a certain career field, although he did not intend to do so (response "c"), and one provided an unclassifiable response. Most of the respondents stated that their parents played a supportive, helpful role in their searches for potential career fields but did not expect them to do anything in particular.

Question eight. Other than family members, who influenced your career development and how?

Response categories included (a) no one; (b) my coach; (c) someone through school (e.g., professors) or work, friends; and (d) an unclassifiable response. Eight of the respondents stated that someone through school, work, or friends had influenced them (response "c"), one was influenced by no one (response "a"), and one was influenced by his/her coach (response "b").

CHAPTER 5 DISCUSSION

The purpose of this study was to investigate differences in career maturity and presence of athletic identity among elite athletes and nonathletes. Independent variables examined included ego-identity status, age, gender, years in competitive sport (elite athletes only), years of education, and parents' annual income. Both questionnaire and interview data were collected and analyzed to fulfill the purposes of this study.

The following discussion is focused on the eight hypotheses made and the interviews (with the elite athletes). The information from the interviews is used to elaborate on the findings in the quantitative component of the study and, therefore, is interspersed throughout the evaluations of the hypotheses. The remainder of this chapter includes limitations of this study, implications of the research, and recommendations for applied work and future research.

Limitations

Inherent in any study that relies on self-report information are some obvious limitations. For example, self-reported behavior may lack direct correspondence with actual behavior. There is also the possibility that the individuals

who completed the questionnaires and interviews did not accurately report their behaviors. In regard to the questionnaire part of the study, another limitation to self-report instruments is that the individuals cannot qualify their responses. The interviews were used in an effort to offset that limitation; however, only the elite athletes were interviewed in order to develop a profile of career and identity development issues for elite athletes.

Although the athletes at the USOTC are from all over the country, the unique environment of the training center may prevent generalizability to a wide variety of elite athletes who train in other kinds of training environments. However, two other training centers exist, and a fourth one is being built in an effort to centralize the training of elite athletes, as well as to provide the athletes with the best training facilities and resources available. Several national governing bodies have named specific sites as "national training center sites" that serve the athletes in their particular sports. Although these sites are not affiliated with the USOC, the training environment is similar to those found at the Olympic Training Center sites. Therefore, it would be expected that the population of athletes at these sites is similar to those found at the Olympic Training Center sites. Thus, the generalizability of the results may be potentially extended.

Evaluation of Hypotheses

Hypotheses One and Two

Hypotheses one and two addressed differences in the level of career maturity as functions of elite athletic status, ego-identity status (interpersonal and ideological), and gender, and interactions among these variables in regard to career maturity. No significant differences or interactions were found in these hypotheses. Therefore, differences apparently do not exist between elite athletes and nonathletes in regard to career maturity.

Fifty-nine percent of the subjects (N=101) were classified in ideological moratorium status in regard to ego-identity status. The ideological domain of ego-identity status includes occupation, politics, religion, and philosophical lifestyle. This was the only variable that approached significance in the analyses. Considering that this domain includes occupation as one of its constructs, it is logical that occupational identity would be associated with career maturity. The relatively low ACCI scores apparently reflect the fact that the sample was largely in moratorium in regard to their phase of occupational development. The interpersonal domain of ego-identity status includes friendship, dating, sex roles, and recreation. Sixty-four percent of the subjects (N=110) were classified in interpersonal moratorium. It appears these subjects were still "in crisis" regarding their identities in respect to

potential careers and in a variety of other capacities. Blustein et al. (1989) posited that career exploration is positively associated with the moratorium and identity-achieved statuses and inversely related to the diffusion status.

Forty-four of the athletes (46.3%) were classified in interpersonal moratorium while 42.5% (N=47) of the athletes were classified in ideological moratorium. These numbers and percentages dispute claims (e.g., Blann, 1985; Petitpas, 1981; Petitpas & Champagne, 1988) that athletes tend to be identity foreclosed in regard to career exploration. Of the athlete subjects, only one was found to be in ideological identity foreclosure, while three were found to be interpersonally identity foreclosed. This provides evidence that the athletes are exploring their career options, at least to some degree. This information is collaborated by the interviews in which 9 of the 10 athletes stated they had done some or even a considerable amount of career exploration. The most salient career crises focused on what career or job opportunities would allow them flexibility to train and compete, as well as to gain experience for their career aspirations.

When interviewed, 5 of the 10 athletes stated that they had thought about a few potential careers but had not contrived a plan to implement a choice. Those same five claimed they needed more information in regard to how much

schooling or on-the-job training they would need to implement their options. Four of the 10 athletes interviewed had made career decisions and knew what they would have to do to implement their career choices when the time came to retire from their athletic careers. A perhaps significant factor was that the mean age for the athletes was 23.8 years. Almost 70% of the athletes had attended some college or had college degrees. This supports Perna's (1991) claim that ceiling effects of the measuring instruments had not been accounted for in conclusions regarding developmental status which had been identified as relevant in prior studies comparing athletes and nonathletes (Hauser & Lueptow, 1978; Stevenson, 1975). Perhaps athletes do "catch up" with their age-related peers later in their lives (i.e., after college).

The lack of foreclosure among the athlete sample is collaborated by the interviews as well. Of the 10 athletes interviewed, the question regarding how much influence their parents had on their career considerations, 8 out of 10 said they had no influence whatsoever on their choices. One stated that it had been suggested that the athlete go into a particular career field because the athlete's parents had enjoyed the particular field, and one said that he was expected to go into a particular career field because his parents thought it would be best. Even though this particular athlete was expected to go into a particular career field, he was not planning to do it and had other

plans. Of the 10 athletes interviewed, 8 stated that someone through school (e.g., professors), coworkers or friends had influenced their career ideas the most. Only one athlete stated that the athlete's coach influenced the athlete's career ideas, and one athlete said no one had been particularly influential in regard to her career ideas.

Hypotheses Three and Four

Hypotheses three and four addressed differences in presence of athletic identity as functions of athletic status, ego-identity status (interpersonal and ideological), and gender, and whether there were interactions among these variables in regard to presence of athletic identity. Significant differences were found for presence of athletic identity based on both athletic status and gender, but not based on ego-identity status. Elite athletes clearly have a higher presence of athletic identity but that does not lend itself to identity foreclosure, as previously speculated. Therefore, what seems evident based on this research is that these athletes have high self-complexity, or believe although athletics is salient to their identities, it is not the only thing that defines them as people. If they were experiencing low self-complexity, then more identity foreclosure would be expected.

This information is corroborated by the athletes' interviews because although 7 out of 10 said they had always been involved in athletics at a high level and had

goals to compete in the Olympics, they also said that if they were no longer able to compete, it would be alright and they would move on to other goals and plans. Two stated it would be difficult to adjust to life without sport, and only one said it would be the worst thing that could happen to him and that he would have no idea what to do without sport in his life.

Although many of the athletes stated that it would be disappointing or devastating not to be able to compete anymore, what was more evident was that the athletes would reestablish goals in a different area of their lives and progress towards them with the same kind of vigor and dedication it had taken to become an elite athlete. One athlete commented, "I would be devastated, but I would find something else to do at a high level." Another stated, quite bluntly, "You can always compete in everything in life." Yet, another suggested that "I would miss it, but I have other interests that I would pursue." Although the void of not training and competing at a high level would be an adjustment for many of them, the athletes' general sentiments can be summed up by one athlete's comment that "I would always miss it, but I would set new goals and move on." One athlete joked that she "wouldn't know what to do with her free weekends."

It seems having well-developed goals was important to all of the athletes. At the time of the interviews (9 months

after the 1992 Olympic Games) two athletes were ambivalent regarding their athletic goals and were contemplating whether they were going to continue to train in their respective sports. This ambivalence was disconcerting to them, and they were uneasy with the current lack of direction in their lives. This observation lends credence to much of the career transition literature that suggests that many athletes could benefit from counseling through the transition period from elite athlete to whatever comes next for them. Of course, transition experiences out of sport are dictated by many factors, and each athlete will have his own set of circumstances to manage when the time comes.

There seems to be a trend that the older athletes have a better perspective on what their lives would be like without sport. One athlete (age 28) commented, "If you would have asked me that question 2 years ago, it would have been the end of the world. But now, I see other people pursuing careers, and it looks pretty good to me." This statement may reflect a common malady among elite athletes who fall victim to the "social clock" (i.e., normative types of behavior for age-related peers). It also could reflect the athlete's new found perspective that there is more to life than being a competitive athlete. Summatively, these comments reflect that the athletes view themselves complexly and are able to transfer the skills and abilities they develop through their athletics to other areas of their lives, although they have

high need for achievement and productivity and athletics is their current outlet. They would redirect their energies into other areas if necessary.

Another possibility for the results of these hypotheses is that sport for the sake of participation in sport is no longer the most motivating factor for these individuals. Participation in elite sports in anticipation of capitalizing on results (gold medals) can be viewed as a career decision in itself. The sport can be viewed as a stepping stone to other career possibilities, and elite athletes are learning how to develop themselves into a promotion package with the intention of capitalizing on their results and ensuing "fame." Therefore, it is possible that elite athletes forego pursuing more traditional career paths in hopes that their participation in elite athletics will set them up for their futures.

The males in this sample, regardless of athletic status, had significantly higher AIMS scores than females. However, when the male and female athletes were tested among themselves, the differences in AIMS scores were not significant. Therefore, there were gender differences in general but not in the respective groups.

Hypotheses Five and Six

Hypotheses five and six explored the relationships between presence of athletic identity and the independent variables of age, years in sport (athletes only), years of

education, and parents' annual income for elite athletes and nonathletes. Neither the athletes nor nonathletes demonstrated significant differences based on the independent variables in regard to presence of athletic identity, but there was a tendency for athletes' AIMS scores to decrease as the athletes got older. Possibly this is an indication that the younger the athlete, the more central his or her athleticism is to his or her identity. As athletes mature, they are discovering other parts of their identities. This information also lends credence to the findings for college age (18 to 22 years old) athletes regarding high athletic identity scores. Although the interviews with the athletes reflected a high level of involvement in athletics for a significant part of their lives (7 out of 10 had always been involved on a high level), and undoubtedly creating the significant scores on the AIMS, there was evidence that the athletes have a high level of self-complexity. Broader interests potentially can help athletes to maintain perspective on their sports and to keep their stress levels at a manageable level so they can perform efficiently (Gould et al., 1992). It is a common myth that elite athletes have to focus completely on their sport to the exclusion of all other things in life, thus keeping them from exploring their identities in a variety of areas. The research of Gould et al. (1992) in this area discounted this notion and suggested

that athletes who get away from their sport were better able to focus on their performance when it came time to compete.

Hypotheses Seven and Eight

Hypotheses seven and eight explored whether there were significant relationships between career maturity and age, years of education, or parents' annual income for elite athletes and nonathletes. For the athletes, there were no significant relationships between the independent variables and career maturity, suggesting that their career maturity levels are not increasing despite their advancement in age and years of education. Perhaps the athletes are staying in moratorium for a longer time period and do not feel or have the need to commit to a career choice. Conversely, their age-related nonathlete peers must decide upon career choices in a timely and "normative" fashion. Athletics (especially elite athletics) can be viewed as a socially acceptable way to postpone making a commitment to a career choice. Despite the fact that the athletes are attending and graduating from college, it is possible that they are not taking advantage of programs or opportunities that would expose them to potential career fields. It also is possible they are not looking at school as a learning and exploring process but, instead, looking at it from a more outcome-oriented perspective. Perhaps they simply do not have the time to take advantage of out-of-classroom experiences because of their training time constraints.

The relationship between career maturity and nonathletes' ages and years of education was significant, thus suggesting that increase in age and the years of education does affect their career maturity levels. Nonathletes probably feel more of a need to explore career options and make decisions in a timely fashion. Perhaps the results of these hypotheses reflect human nature in that people do not make decisions until they have to do so. Also, nonathletes may have more time to explore out-of-classroom experiences, determine their interests, and eliminate options they do not find desirable. Elite athletes are more likely to be restrained by time and logistics, thus preventing latitude to engage in other activities. Moreover, elite athletes traditionally have not been encouraged to explore other opportunities or lifestyles because of the irrational fear that it will "take their focus away from their athletics, and that would not be good for them."

Implications and Recommendations

Completion of this study has resulted in an increased understanding of the career and identity development patterns of elite athletes. There are numerous implications for theory, training, practice, and research.

In regard to general developmental theory, this research partially supported the notion that athletes are developmentally delayed (Petitpas & Champagne, 1988). It also supported the contention that elite athletes derive a

certain amount of their identities from sport and generally structure their lives to be compatible with athletic advancement (Brewer et al., 1993; Petitpas, 1981). It is posited that presence of athletic identity "tops out" at around the 13th year mark of an athlete's career in competitive sport, which suggests that elite athletes eventually begin to view themselves more broadly in regard to other areas of their lives. The athletes in this study did have high presence of athletic identity scores, but this did not predispose them to identity foreclosure.

Although this research did not support the notion that athletes are less career mature than their nonathlete peers, it did reveal that athletes' exploratory behavior is potentially hampered by their heavy involvement in sport. This is supported by the seventh and eighth hypotheses in this study that indicated that age and years of education have a positive effect on career maturity scores for nonathletes but not for athletes. This supports the notion that developmental stages are not necessarily age-related. From a developmental task perspective (Havighurst, 1953), athletes may be behind their nonathlete peers because much of their time is consumed by athletics. However, career exploration is positively associated with the identity moratorium status (Blustein et al., 1989), and a predominant number of elite athletes fell into this category.

Unfortunately, it is unknown whether athletes remain in moratorium longer than their age-related, nonathlete peers.

In regard to training and practice, it is important for counseling professionals who plan to work with elite athletes to become knowledgeable about the unique demands that athletes confront in their everyday lives. If there are specialized courses available about athlete issues, counseling professionals should make an effort to take them. Elite athletes can be considered a minority population with special needs and issues. Supervised training also is essential to gaining the knowledge and skills necessary to appropriately serve this population.

Organizations that house elite athletes (i.e., training centers or universities) have a responsibility to facilitate the development of athletes in regard to all aspects of their lives. The USOTC is making an effort to do this by providing two programs, the Career Assistance Program for Athletes (CAPA) and Olympic Job Opportunities Program (OJOP), to elite athletes at the training centers and around the country. These programs have been moderately successful in helping athletes formulate career plans that will serve them well both during their competitive years as well as into retirement from athletics.

Universities have a responsibility to their student-athletes in regard to facilitating their personal development. However, many universities do not accept this

responsibility. From a programmatic standpoint, there needs to be a push for integrating the counseling efforts of the advisement personnel (such as having the athlete state academic, career, and athletic goals) and evaluating progress towards these goals. Making career counseling a requirement may facilitate the career development of elite athletes and enable them to prepare for the transition out of their sports more successfully, at least on a functional level. Petitpas and Champagne (1988) and Chartrand and Lent (1987) provided developmental programs for athletes and made several good recommendations in regard to the unique needs of athletes. This support, however, is a complex issue and will be developed and discussed in more detail shortly.

Future research recommendations include more research into the multidimensionality of identity development and its effects on athletic identity. The construct of self-complexity should be addressed in regard to athletic identity and how it relates to career development patterns of elite athletes. Athletes with high self-complexity may cope more effectively with various developmental tasks than athletes with low self-complexity. High self-complexity may also lend itself to lower stress levels, thus lowering injury potential and depression levels. Comparisons of self-complexity between ethnic groups would also be beneficial. People will develop a particular sense of complexity as a function of

ethnic identity, and elite sports are certainly cross-cultural playgrounds.

Prospective longitudinal research needs to be done on athletes to determine how athlete identity develops and how it impacts the overall development of the persona of the athlete. Longitudinal data would be helpful in determining how and when counseling professionals should intervene into an athlete's life to offset potentially damaging effects of elite athletics.

More research also needs to be done to determine whether there are significant differences in the identity and career developmental patterns of elite athletes in different sports, such as comparing revenue-producing and non-revenue-producing sports. Research addressing cultural and gender diversity in regard to development of elite athletes is necessary as well.

When programs are developed that address the unique needs of elite athletes, it will be important to evaluate these programs and the effects they have in regard to optimal development of the athletes. These programs need to be theory-driven and psychoeducational in nature, thus offering a proactive, health-engendering framework for service delivery and focuses on the individual learning cross-situational, life-coping skills (Chartrand & Lent, 1987).

This research also has implications for research in other populations that may be similar in regard to the demands, both public and private, experienced by elite

athletes. For example, professional dancers, musicians, and actors may have similar lifestyles and experience difficulties similar to those of elite athletes. Research with these various populations may answer questions in regard to identity development among people who are subjected to role conflict and public scrutiny on a regular basis.

One of the critical elements of this investigation was the use of the ACCI. Although this instrument is considered reliable and valid and is a good clinical instrument, it may not have been sensitive enough as a research instrument to satisfactorily derive information regarding career maturity of the subjects. For those who may be interested in continuing this line of research, it is recommended that a different career maturity instrument be used.

Conclusions

The purpose of this study was to investigate the constructs of career maturity and presence of athletic identity among elite athletes and nonathletes in regard to ego-identity status, age, gender, years of education, parents' annual income, and years in competitive sport. Results of the study suggest that athletes may indeed be developmentally delayed in regard to career development but are not significantly different from their age-related, nonathlete peers. Elite athletes do display high levels of presence of athletic identity but do not have a propensity towards identity foreclosure as is suggested in previous

research. However, it may be preventing exploratory behavior, thus delaying the efforts of the athletes to make a commitment to a potential career field. The time constraints and demanding schedules of elite athletes make it difficult for them to make commitments to occupational opportunities while still actively training and competing.

Elite athletes may indeed be developing at a different rate than their nonathlete peers, but they are also getting to take advantage of unique opportunities such as extensive international travel, experiencing a variety of cultures first hand, learning how to set goals and systematically train in order to accomplish them, learning how to accept victory and defeat, learning how to take constructive criticism and use it to better their performances, and learning how to be disciplined and focused under various conditions. Perhaps certain aspects of elite athletics have gotten out of control, but, in general, it can still be believed that sport is a viable way to learn valuable life lessons successfully that can be transferred to and from the various roles that athletes play over the course of their lives.

APPENDIX A
ATHLETE IDENTITY MEASUREMENT SCALE

AIMS

Please circle the number for each item that most closely reflects your feelings about the statement.

Choose from the following numbers:

- | | |
|----------------------|-------------------|
| 1. strongly disagree | 5. somewhat agree |
| 2. disagree | 6. agree |
| 3. somewhat disagree | 7. strongly agree |
| 4. neutral | |

1. I consider myself an athlete.

1 2 3 4 5 6 7

2. I have many goals related to sport.

1 2 3 4 5 6 7

3. Most of my friends are athletes.

1 2 3 4 5 6 7

4. Sport is the most important part of my life.

1 2 3 4 5 6 7

5. I spend more time thinking about sport than anything else.

1 2 3 4 5 6 7

6. I need to participate in sport to feel good about myself.

1 2 3 4 5 6 7

7. Other people see me mainly as an athlete.

1 2 3 4 5 6 7

8. I feel bad about myself when I do poorly in sport.

1 2 3 4 5 6 7

9. Sport is the only important thing in my life.

1 2 3 4 5 6 7

10. I would be very depressed if I were injured and could not compete.

1 2 3 4 5 6 7

APPENDIX B
EXTENDED OBJECTIVE MEASURE OF EGO-IDENTITY STATUS

EOM-EIS-2

Read each item and indicate to what degree it reflects your own thoughts and feelings. If a statement has more than one part, please indicate your reaction to the statement as a whole. Indicate your answer by circling one of the following responses.

- A = STRONGLY AGREE
B = MODERATELY AGREE
C = AGREE
D = DISAGREE
E = MODERATELY DISAGREE
F = STRONGLY DISAGREE

1. I haven't chosen the occupation I really want to get into, and I'm just working at what is available until something better comes along.
A B C D E F
2. When it comes to religion I just haven't found anything that appeals and I don't really feel the need to look.
A B C D E F
3. My ideas about men's and women's roles are identical to my parents'. What has worked for them will obviously work for me.
A B C D E F
4. There's no single "life style" which appeals to me more than another.
A B C D E F
5. There are a lot of different kinds of people. I'm still exploring the many possibilities to find the right kind of friends for me.
A B C D E F
6. I sometimes join in recreational activities when asked, but I rarely try anything on my own.
A B C D E F

A = STRONGLY AGREE D = DISAGREE
 B = MODERATELY AGREE E = MODERATELY DISAGREE
 C = AGREE F = STRONGLY DISAGREE

7. I haven't really thought about a "dating style." I'm not too concerned whether I date or not.
- A B C D E F
8. Politics is something that I can never be too sure about because things change so fast. But I do think it's important to know what I can politically stand for and believe in.
- A B C D E F
9. I'm still trying to decide how capable I am as a person and what jobs will be right for me.
- A B C D E F
10. I don't give religion much thought and it doesn't bother me one way or the other.
- A B C D E F
11. There's so many ways to divide responsibilities in marriage, I'm trying to decide what will work for me.
- A B C D E F
12. I'm looking for an acceptable perspective for my own "life style" view, but haven't really found it yet.
- A B C D E F
13. There are many reasons for friendship, but I choose my close friends on the basis of certain values and similarities that I've personally decided on.
- A B C D E F
14. While I don't have one recreational activity I'm really committed to, I'm experiencing numerous leisure outlets to identify one I can truly enjoy.
- A B C D E F

A = STRONGLY AGREE D = DISAGREE
B = MODERATELY AGREE E = MODERATELY DISAGREE
C = AGREE F = STRONGLY DISAGREE

15. Based on past experiences, I've chosen the type of dating relationship I want now.
- A B C D E F
16. I haven't really considered politics. It just doesn't excite me much.
- A B C D E F
17. I might have thought about a lot of different jobs, but there's never really been any question since my parents said what they wanted.
- A B C D E F
18. A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.
- A B C D E F
19. I've never really seriously considered men's and women's roles in marriage. It just doesn't seem to concern me.
- A B C D E F
20. After considerable thought I've developed my own individual viewpoint of what is for me an ideal "lifestyle" and don't believe anyone will be likely to change my perspective.
- A B C D E F
21. My parents know what's best for me in terms of how to choose my friends.
- A B C D E F
22. I've chosen one or more recreational activities to engage in regularly from lots of things and I'm satisfied with those choices.
- A B C D E F

A = STRONGLY AGREE
B = MODERATELY AGREE
C = AGREE

D = DISAGREE
E = MODERATELY DISAGREE
F = STRONGLY DISAGREE

23. I don't think about dating much. I just kind of take it as it comes.

A B C D E F

24. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.

A B C D E F

25. I'm not really interested in finding the right job, any job will do. I just seem to flow with what is available.

A B C D E F

26. I'm not sure what religion means to me. I'd like to make up my mind but I'm not done looking yet.

A B C D E F

27. My ideas about men's and women's roles have come right from my parents and family. I haven't seen any need to look further.

A B C D E F

28. My own views on a desirable lifestyle were taught to me by my parents and I don't see any need to question what they taught me.

A B C D E F

29. I don't have any real close friends, and I don't think I'm looking for one right now.

A B C D E F

30. Sometimes I join in leisure activities, but I really don't see a need to look for a particular activity to do regularly.

A B C D E F

A = STRONGLY AGREE
 B = MODERATELY AGREE
 C = AGREE

D = DISAGREE
 E = MODERATELY DISAGREE
 F = STRONGLY AGREE

31. I'm trying out different types of dating relationships. I just haven't decided what is best for me.

A B C D E F

32. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.

A B C D E F

33. It took me awhile to figure it out, but now I really know what I want for a career.

A B C D E F

34. Religion is confusing to me right now. I keep changing my views on what is right and wrong for me.

A B C D E F

35. I've spent some time thinking about men's and women's roles in marriage and I've decided what will work best for me.

A B C D E F

36. In finding an acceptable viewpoint to life itself, I find myself engaging in a lot of discussions with others and some self exploration.

A B C D E F

37. I only pick friends my parents would approve of.

A B C D E F

38. I've always liked doing the same recreational activities my parents do and haven't ever seriously considered anything else.

A B C D E F

39. I only go out with the type of people my parents expect me to date.

A B C D E F

A = STRONGLY AGREE D = DISAGREE
B = MODERATELY AGREE E = MODERATELY DISAGREE
C = AGREE F = STRONGLY DISAGREE

40. I've thought my political beliefs through and realize I can agree with some and not other aspects of what my parents believe.
- A B C D E F
41. My parents decided a long time ago what I should go into for employment and I'm following through their plans.
- A B C D E F
42. I've gone through a period of serious questions about faith and can now say I understand what I believe in as an individual.
- A B C D E F
43. I've been thinking about the roles that husbands and wives play a lot these days, and I'm trying to make a final decision.
- A B C D E F
44. My parents views on life are good enough for me, I don't need anything else.
- A B C D E F
45. I've had many different friendships and now I have a clear idea of what I look for in a friend.
- A B C D E F
46. After trying a lot of different recreational activities I've found one or more I really enjoy doing by myself or with friends.
- A B C D E F
47. My preferences about dating are still in the process of developing. I haven't fully decided yet.
- A B C D E F

A = STRONGLY AGREE
 B = MODERATELY AGREE
 C = AGREE

D = DISAGREE
 E = MODERATELY DISAGREE
 F = STRONGLY DISAGREE

48. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.

A B C D E F

49. It took me a long time to decide but now I know for sure what direction to move in for a career.

A B C D E F

50. I attend the same church as my family has always attended. I've never really questioned why.

A B C D E F

51. There are many ways that married couples can divide up family responsibilities. I've thought about lots of ways, and now I know exactly how I want it to happen for me.

A B C D E F

52. I guess I just kind of enjoy life in general, and I don't see myself living by any particular viewpoint to life.

A B C D E F

53. I don't have any close friends. I just like to hang around with the crowd.

A B C D E F

54. I've been experiencing a variety of recreational activities in hopes of finding one or more I can really enjoy for some time to come.

A B C D E F

55. I've dated different types of people and know exactly what my own "unwritten rules" for dating are and who I will date.

A B C D E F

A = STRONGLY AGREE
B = MODERATELY AGREE
C = AGREE

D = DISAGREE
E = MODERATELY DISAGREE
F = STRONGLY DISAGREE

56. I really have never been involved in politics enough to have made a firm stand one way or the other.

A B C D E F

57. I just can't decide what to do for an occupation. There are so many that have possibilities.

A B C D E F

58. I've never really questioned my religion. If it's right for my parents it must be right for me.

A B C D E F

59. Opinions on men's and women's roles seem so varied that I don't think much about it.

A B C D E F

60. After a lot of self-examination I have established a very definite view on what my own life style will be.

A B C D E F

61. I really don't know what kind of friend is best for me. I'm trying to figure out exactly what friendship means to me.

A B C D E F

62. All of my recreational preferences I got from my parents and I haven't really tried anything else.

A B C D E F

63. I date only people my parents would approve of.

A B C D E F

64. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.

A B C D E F

APPENDIX C
INFORMATION CONSENT FORMS FOR ATHLETES
AND NONATHLETES

Information/Consent Form

Dear Participant:

My name is Megan Neyer and I am a doctoral student at the University of Florida. I also am currently a clinical and research assistant in the Mental Training and Counseling Department at the U.S. Olympic Training Center in Colorado Springs, CO.

As a former Olympic athlete (diver) interested in sport psychology, I am currently conducting research on career and identity developments of elite athletes. I would very much appreciate it if you would take the time to fill out the enclosed questionnaires (it should take approximately 30 minutes to complete them).

Please understand that your participation is voluntary, and that all information collected will be kept ANONYMOUS. This page will be kept separate from the questionnaires, and you do not have to put your name on the questionnaires. You also do not have to answer any question that you choose not to answer, and you are free to discontinue participation in this study at any time. If you are interested, the compensation you will receive will be feedback about the information I collect about your own career development process, so I will need your name in order to do so.

I am also interested in conducting interviews about career and identity development. If you are willing to be interviewed, please provide a telephone number so I can contact you to set up a time.

Thank you very much for your participation in this project.

Sincerely,

Megan Neyer
USOC/ Athlete Performance Division
1750 E. Boulder St.
Colorado Springs, CO 80909
(719) 578-4516 Ext. 5725

I have read and I understand the procedure described above. I agree to participate in the procedure, and I have received a copy of this description.

Signature -----

Telephone number (if you are willing to be interviewed)

Information/Consent Form

Dear Participant:

My name is Megan Neyer and I am doctoral student at the University of Florida. I also am currently a clinical and research assistant in the Mental Training and Counseling Department at the U. S. Olympic Training Center in Colorado Springs, CO.

As a former Olympic athlete (diver) interested in sport psychology, I am currently conducting research on career and identity developments of elite athletes. I would very much appreciate it if you would take the time to fill out the enclosed questionnaires (it should take approximately 30 minutes to complete them).

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Thank you very much for your participation in this project.

Sincerely,

Megan Neyer
USOC/Athlete Performance Division
1750 E. Boulder St.
Colorado Springs, CO 80909
(719) 578-4516 Ext. 5725

I have read and I understand the procedure described above. I agree to participate in the procedure, and I have received a copy of this description.

Signature _____ Date _____

APPENDIX D
ATHLETE AND SUBJECT DEMOGRAPHIC
INFORMATION QUESTIONNAIRES

Athlete Demographic Information

Name: (optional) _____

Age: _____

Gender: _____

Race: _____

Current sport: _____

Years in current sport: _____

Education Background: (check one)

I have completed:

some high school _____

high school degree _____

some college _____

college degree _____

some graduate school _____

graduate degree _____

Marital Status: Single___ Married___ Separated/Divorced ___

My parents' occupations:

Mother _____

Father _____

Average income my parents made collectively when I was living at home: (round out to the nearest thousand dollars, and estimate to the best of your ability)

Please name two (NONATHLETE) friends who are similar to you (age, gender) and who you think may be willing to complete the inventories in the packet.

1) _____

(name, address, tel. #)

2) _____

(name, address, tel. #)

Subject Demographic Information

Name: (optional) _____

Age: _____

Gender: _____

Race: _____

Education Background: (check one)

I have completed:

some high school _____

high school _____

some college _____

college degree _____

some graduate school _____

graduate degree _____

Marital Status: Single___ Married___ Separated/Divorced___

My parents' occupations:

Mother _____

Father _____

Average income my parents made collectively when I was living
at home: (round out to the nearest thousand dollars, and
estimate to the best of your ability)

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BIOGRAPHICAL SKETCH

Megan Neyer was born June 11, 1962, in Ashland, Kentucky. She is the youngest of five children born to Dr. and Mrs. John Neyer.

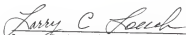
In 1980 she graduated from Mission Viejo High School in Mission Viejo, California. She attended the University of Florida and graduated in 1986 with a Bachelor of Science degree in psychology. In 1990 she completed her Master of Education and Specialist in Education degrees from the Counselor Education Department at the University of Florida. In 1991 she enrolled in the doctoral program in the Counselor Education Department at the University of Florida, choosing the emphases of sport and health psychology.

Megan is a member of several professional organizations including the American Counseling Association and the Association for the Advancement of Applied Sport Psychology and is a nationally certified counselor by the NBCC.

Megan's professional interests include mental training for athletes so that they are able to perform competitively to the best of their ability, holistic health and medicine, and wellness counseling. She is also interested in the areas of psychoneuroimmunology and rehabilitation counseling.

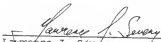
Megan spent 14 years of her life training as a elite competitive athlete in the sport of diving. Some of her accomplishments include being an Olympian, World Champion, 15-time United States national diving champion, and 8-time SEC and NCAA champion. She has been fortunate to travel around the world during her tenure as a diver, thus being introduced to a variety of cultures and people. She is now happily retired from diving and is currently employed by the United States Air Force Academy in Colorado Springs, Colorado. She is the assistant director of the Human Performance Laboratory and is in charge of the sport psychology program for the cadet-athletes. Some of her personal hobbies include hiking, whitewater rafting, spending quality time with friends, recreational sports, and free-lance writing.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Larry C. Loesch, Chairperson
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.




Lawrence J. Severy
Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Peter A. Sherrard
Associate Professor of Counselor
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Phyllis M. Meek
Associate Professor of Counselor
Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 1994

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Dean, Graduate School

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